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ABSTRACT

This resource guide is designed to assist educators by identifying materials that will develop the skills tested on the mathematics section of the New Jersey High School Proficiency Test (HSPT). Major sections included are: (1) "Introduction" (describing background information on the HSPT and format of this guide); (2) "Mathematics Skills Assessed on the High School Proficiency Test" (listing seven clusters and specific skills); (3) "Software" (providing a matrix illustrating the grade level and the HSPT skill of 102 software packages and a list of producers; and (4) "Video Programming" (presenting a matrix illustrating the grade level and the HSPT skill of 136 video programs and a list of sources for the programs). Each software or video program has its grade level, instructional mode, system requirements, or length specified. Twenty-three references are listed. Appendix A contains addresses of three Educational Technology Training Centers and lists of periodicals and documents. Appendix B contains a software identification form and an evaluation form for this guide. (YP)

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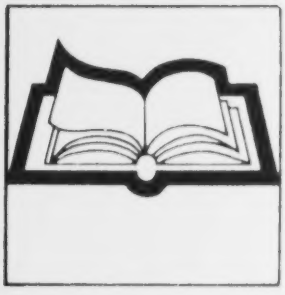

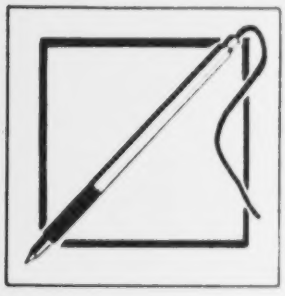

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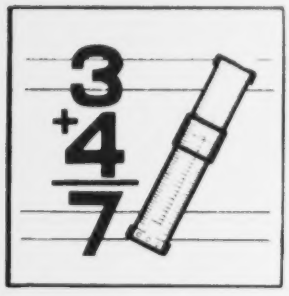
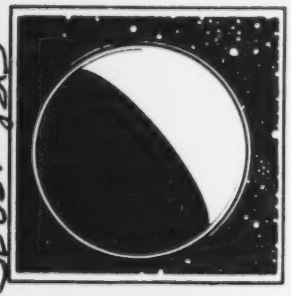


HSPT RESOURCE GUIDE: MATHEMATICS

SE 050 823



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New Jersey State Department of Education

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COMPUTER AND VIDEO INSTRUCTIONAL MATERIALS

HSPT RESOURCE GUIDE: MATHEMATICS

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FOREWORD

Since the 1985-86 school year, New Jersey students entering the ninth grade have had to pass a newly instituted, rigorous achievement test -- the High School Proficiency Test (HSPT) -- to receive a state-endorsed high school diploma. The High School Proficiency Test is a key element for raising educational standards in New Jersey. To meet the challenge that the HSPT poses to students, parents, and educators, the New Jersey State Department of Education has undertaken a comprehensive program to help local districts prepare their students for the specific skills measured by the HSPT.

As part of this comprehensive program, the department has developed three resource guides listing computer software and video programs that support skill development for the HSPT in the areas of writing, reading, and mathematics. These guides will assist educators in using the technology available in their schools for its intended purpose -- to help teachers teach and students learn.

This guide, Computer and Video Instructional Materials - HSPT Resource: Mathematics, is designed to help New Jersey mathematics teachers select materials to use in preparing students for the mathematics section of the HSPT. The identified programs are not intended to substitute for traditional classroom instruction, but rather to reinforce skills and enhance the teaching of mathematics. I think teachers and other educators will find these materials to be an excellent means to augment curricula currently being used throughout New Jersey.

Saul Cooperman
Commissioner of Education

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INTRODUCTION

This resource guide to computer and video instructional materials is designed to assist educators by identifying materials that will develop the skills tested on the mathematics section of the High School Proficiency Test (HSPT). An instructor can use the materials identified to provide additional instruction, review, maintenance, or enhancement of the specific skills measured on the HSPT.

Careful selection and integration of supplemental materials, such as computer and video programming, can greatly enhance a mathematics curriculum. Knight and Bozeman (1981) support that CAI (computer-assisted instruction) used to supplement instruction can enhance learning; and in at least two studies, researchers have found CAI to be more effective than traditional instructional methods. Secondary students attain a more positive attitude toward instruction when exposed to CAI (Kulik, Barnert, & Williams, 1983); and instructional effectiveness and efficiency increase as reported by Kearsley, Hunter, and Seidel (1983). A survey of CAI techniques used as early as 1975 includes the following observations: "All studies reviewed have shown normal instruction supplemented by CAI to be more effective than normal instruction alone... All studies showed that it took less time for students to learn through CAI than through other methods." (Knight & Bozeman, 1981). These technologies can provide diverse opportunities for learning, such as drill and practice, tutorial presentations, enrichment, and simulations.

Technologies, such as the VCR (video cassette recorder) and especially the computer, have intrinsic qualities which lend themselves to enhancing education. "The computer can function in a variety of helpful ways in drill activities. In some ways the computer is superior to humans for this. Computers are infinitely patient," (Balajthy, 1984). Feedback is especially important in the learning process during the development of accuracy skills. The computer has the capability to provide immediate, repeated feedback for students of all levels (LaBerge & Samuels, 1974) and to present the materials at varying rates. "Students work and learn at different rates: The computer is ideally suited to match rate of presentation to each individual student." (Balajthy, 1984).

The number of computers in our schools is increasing rapidly. According to Becker (1985), "More than 1 million computers are in use in the nation's elementary and secondary schools, and more than 15 million students made use of these machines over the last year." Not only is the number of computers growing, but the time students spend actually using the machines and the use of computers in classes other than mathematics and/or computer instruction are increasing greatly. Computers can provide an exciting and viable educational resource. This resource should be put to good use.

The enormous growth of technology in the classroom is not limited to computers. Use of the VCR with its accompanying educational programming has expanded at a considerable rate. "An estimated 18.5 million elementary and secondary school students in the U.S.A. received some classroom instruction from television in 1982-83, and some 580,000 teachers used computers in the classroom. (Also,) three-fourths of all schools had one or more recorders

available for use in 1983, compared to just one-third in 1977," according to a study commissioned by the Corporation for Public Broadcasting (CPB) and the National Center for Education Statistics (NCES) (Educational Technology, 1984). Many schools plan to expand their VCR capabilities as reported in the CPB study.

Good programming is a key element of video and computer-assisted instruction (CAI). Of the large number of programs available for virtually every computer on the market, only a minority are considered good; and a very small percentage are considered superior. Programs which are nothing more than electronic worksheets, which are dull or unimaginative, which have poor documentation or user support, or which present topics in a confusing manner, are all too common. Programming that fully uses the computer or VCR as a tireless instructor capable of demonstrating concepts in a logical, creative, and imaginative way exists, however, and can provide students of all abilities and levels with a learning tool of outstanding potential. Many competent instructors, willing to embrace new technologies, use these tools to significantly improve the efficiency of their already dynamic instructional process. This guide is intended to assist educators in the selection of the appropriate materials.

BACKGROUND INFORMATION ON THE HSPT

The ninth grade class of 1985-86, slated to graduate in the 1988-89 school year, was the first class in New Jersey required to demonstrate mastery of the necessary basic skills by passing the High School Proficiency Test (HSPT) in order to receive a state-endorsed high school diploma. The HSPT replaces the Minimum Basic Skills (MBS) Test which was the former standard. The MBS Test, given since the 1977-78 school year, was intended to measure only the minimum skills students needed to acquire in school. The HSPT's goal is to measure the more rigorous skills necessary to compete in the advanced American society of the 80's and 90's.

The skills tested on the HSPT were identified by panels selected from elementary, secondary, and higher education, the New Jersey Department of Education, business, and parents. The skills identified are those thought necessary for students to become productive citizens in our society. The skills in the major areas of reading, writing, and mathematics are intended to become the benchmark in the development of a broad-based curriculum. Colleges and businesses repeatedly vocalize the deficiencies of these skills in the entry-level population. By establishing a higher standard as a graduation requirement, the Department of Education is moving toward raising the performance level of students prior to graduation. The HSPT will identify skill areas needing improvement for our students before they leave high school.

The skills measured on the mathematics section of the HSPT are organized in seven areas or clusters of mathematical concepts and operations: computation -- fractions, computation -- decimals, computation -- percents, number concepts, measurement and geometry, pre-algebra, and problem solving. Among these clusters are a total of 45 specific skill areas which are now measured each year.

The required passing score for the mathematics section of the HSPT is 61. Scores are equated each year to accommodate for individual test differences. For those students who take the HSPT as a graduation requirement and do not achieve a passing score in the ninth grade, programs that are developed either by the State Department of Education, the local school district, or both cooperatively provide the additional instruction in skills needed to pass the HSPT when the students take the test in subsequent school years.

The HSPT administered in April, 1986, was the first test on which a passing score was required of ninth grade students in order to obtain a state endorsed high school diploma. Of the 88,552 students who had taken the test in 1985, 56% would have passed on the first attempt. Of the 80,511 ninth grade students who took the 1986 mathematics test, 71.8 percent passed the mathematics section with a mean score of 71.6. This mean score represents an increase of 7.2 points from the 1985 HSPT mathematics mean score of 64.4, with fewer students scoring below 40 than in previous years. These results indicate that school districts are improving their instruction in the mathematics skills emphasized on the HSPT.

SELECTION PROCESS FOR THIS GUIDE

A variety of sources were used in the identification and selection of software for this resource guide. Software available at the Educational Technology Training Centers (ETTCs) was reviewed by New Jersey State Department of Education specialists. This provided the opportunity to identify firsthand software which supports a specific HSPT skill. S.A.T. preparation materials also were included because they support HSPT skill development. When a program was not available for personal review, however, positive reviews and descriptions from various sources served to identify programs appropriate for developing HSPT skills; and whenever possible, multiple sources were used to review the materials.

Programs also considered were those that received recommendations from educators or positive reviews in professional publications. Publications that served as a resource for identifying and selecting software were

The Educational Software Selector (TESS),
Microsift Reviews,
Digest of Software Reviews: Education, and
Educational Products Information Exchange (EPIE)

The video selection was developed by the staff of New Jersey Network (NJN). All video programs licensed by NJN are submitted to a careful screening by teachers, administrators, superintendents, and AVA specialists to ascertain alignment with New Jersey's priorities in education. In preparing for the publication of this document, the staff of NJN further screened the available materials to determine their appropriateness to the HSPT skills.

NOTE: ETTCs are the Department of Education's training centers. See Appendix A for address and telephone listings. See pages 5-7 for descriptors used to identify the software available at these centers.

For video programs, please contact NJN regarding program availability or application. See page 9 for the address and name of the person to contact.

OVERVIEW OF THE GUIDE

The software and video program sections have the same basic format. Each section begins with a matrix of the HSPT skills and the relevant materials according to grade level. The software and video materials are designated by arabic numerals; the skills are identified by Roman Numerals (which indicate the skill cluster) and lower case letters (which indicate the skill within the cluster). These distinctions will enable you to identify readily those materials that relate to an entire cluster and those that focus on only a single skill.

Following the matrix in each section is a list of the materials which includes both the title and additional pertinent information. Although the current lists are both alphabetized (by title) and numbered, future additions will be numerically indexed only. This will allow software and video program updates to be placed conveniently at the end of this document as they are released and distributed directly to school districts. Reviews will also appear in News CLIPS, the New Jersey Department of Education, Division of General Academic Education Educational Technology Unit's monthly newsletter and via the Educational Telecommunications Network (ETN), a computer/telephone communications network sponsored by the Department of Education. Please call the Department of Education, (609) 984-1805, if you would like additional information on these services.

FORMAT OF PRESENTATION

Item #
Title:
Grade Level:
Group Size:
Instructional Mode:
System Requirements:
Producers:
HSPT Skill(s):

ITEM #: The number is a necessary and alternate means of identifying programs and permits cross reference between the matrix and the individual program listings.

TITLE: The title, which is supplied by the producer, should be used to identify the program.

***AVAILABLE**: Programs marked with an asterisk (*) are available at the Education Technology Training Centers (ETTCs). Each center maintains its own software collection and frequently updates the inventory. If you plan to visit one of the centers, please call to verify the availability of a particular program. (See page 86 for the locations and telephone numbers of the centers.)

GRADE LEVEL: Software for grades 4 to 12 are included. The materials were identified with the grade level deemed most appropriate according to current general curricula. Due to the nature of some materials, especially educational games or enrichment programs, however, a wide range of grade-level application may be specified.

GROUP SIZE: In general, this indicates the group size judged most appropriate although this depends on both the design and the resources available. The terms are loosely defined as: individual = 1 or 2 students; small group = 2 to 5 students; large group = 6 students to limit.

INSTRUCTIONAL MODE: Instructors may find a program application other than that listed depending on instructional needs. What may be enrichment for an average class may be drill for a highly motivated group. Preview the materials to determine suitability for a specific group.

- **drill and practice** - provides repetition of skill with frequent student responses
- **tutorial** - provides explanation and/or demonstration; some practice may be presented, possibly a self-teaching experience
- **educational game** - introduces game situation with educational objectives
- **remedial** - provides structure to review or remediate a skill; practice often provided; usually program branching to selected proficiency levels provides the opportunity to review a concept or skill
- **simulation** - presents experiences, such as establishing a business; this type of material may provide problem-solving experiences with a wide application base
- **testing** - provides materials designed to test skill proficiency or to identify a range of abilities
- **enrichment** - provides experiences which explore skills in greater depth or expand their application; may be utilized in various applications, such as motivation, reward, extension, or follow-up of skill development
- **logic and problem solving** - promotes a broad base of intellectual development rather than simply a specific skill, tending to develop the thought processes which underlie and apply to all math skills

SYSTEM REQUIREMENTS: The prevalent microcomputers utilized in schools are listed: Apple, Atari, Commodore 64, Pet, IBM/PC, PC/JR, TRS-80, COLOR (Radio Shack), and TI 99. Due to the large number of specific computer configurations in respect to memory size, accessories, main memory, screen, etc., only generalized names are designated. Please verify specific requirements with the producer. Producers continually update program

applications; therefore, if your computer is not listed, contact the producer for information on current availability.

PRODUCER: This provides the name of the manufacturer and/or distributor of a product. Use the producer list to investigate possible software selections.

HSPT SKILL(S): There are two methods by which an objective may be listed in this document. If the product addresses only a specific skill, the skill referenced will be designated by a Roman Numeral and a lower case letter.

> **example**: "IIb" indicates Cluster II, Computation-Decimals - the specific skill of multiplying decimals.

If the materials encompass a range of skills within a cluster, rather than one specific skill, the reference identifies the cluster with only a Roman Numeral.

> **example**: "VI" designates several skills within the pre-algebra cluster.

In other documents, the HSPT objectives are cross-referenced numerically from 1 to 45.

> **example**: "(7)" identifies Computation-Decimals; Multiplying decimals, the exact same skill designated by as "IIb".

The format of the video program section is similar to that of the software listings with only a few adjustments. Unlike other HSPT guides, this document provides a separate matrix for video programs and the video program reference index, therefore, will not have the prefix V.

These video programs, which are available for distribution to educators in New Jersey through New Jersey Network, provide an excellent resource supplement to an existing mathematics curriculum. Brief summaries of the video program series are presented on pages 50-52 to give you an overview of the materials. Further descriptions and details as to the appropriate grade level(s) and HSPT skill(s) addressed are provided in the numerical listing.

SERIES: This provides the name of the series from which the specific title (or lesson) comes.

LENGTH: This indicates the actual running time of the program.

TAPING RIGHTS: This refers to the expiration date of NJN rights to tape/distribute a program.

NOTE: Since the New Jersey Network has obtained the taping rights to these programs, the producers are not listed. Please contact NJN for details on obtaining any of these programs and format availability. (See page 80 for the location and telephone number of NJN.)

SUGGESTIONS FOR USING THE GUIDE

To make the guide easy to use, follow the steps below.

1. **Use the skills list** on page 10-11 to identify the skill to be emphasized.
2. **Locate programs within the matrices** on pages 15-17 or 47-49. Programs are indexed by skill cluster area and by grade level with a number indicating where in the sequence of listings the program can be found.
3. **Locate program description** in the numbered listing to see if that program is available for your system.
4. **Locate the producer** in the alphabetized list of producers.
5. **Contact** the producer for additional information.
6. **PREVIEW** the selected materials.

****

We strongly recommend that you **preview** the materials if at all possible (check ETTCs for availability).

****

* * * PLEASE NOTE THE FOLLOWING * * *

DISCLAIMER

The inclusion of a particular computer or video program in this guide does not indicate endorsement of any type by the New Jersey State Department of Education. Due to the varying needs among local educators, computer/video programming, although generally related to the skills identified, may not meet a specific need or objective. Use the guide to locate available materials, then PREVIEW. The best and final judge of suitability is you, the user.

SPECIAL ADVICE

Computer software and hardware is an ever-changing media. Please check specific system requirements, configuration, availability, and costs on any prospective materials from the producer or a distributor. System requirements in this guide are specified only in very general terms. Producer addresses are listed on page 39 to facilitate system verification.

HSPT MATHEMATICS CLUSTERS AND SKILLS

The following pages present a list of the seven clusters and specific skills tested on the HSPT. Reproduce this outline freely in order to effectively use this guide. A separate card listing all 45 skills is provided with this manual to facilitate duplication and distribution of the master list for convenient reference. Note that individual skills may be referenced in either of two ways: by Roman numerals and lower case letters (IVb) or by number (1 to 45). When using other documents, check the manner of reference to determine how the skills are designated in that publication.

MATHEMATICS SKILLS ASSESSED ON THE HIGH SCHOOL PROFICIENCY TEST

I. Computation - Fractions

(1) a. Add fractions
(2) b. Subtract fractions
(3) c. Add/subtract 3 fractions
(4) d. Multiply fractions
(5) e. Divide fractions

II. Computation - Decimals

(6) a. Add and subtract decimals
(7) b. Multiply decimals
(8) c. Divide decimals

III. Computation - Percents

(9) a. Find a percentage of a number
(10) b. Find the percentage one number is of another
(11) c. Find the total number when a percentage of that number is known

IV. Number Concepts

(12) a. Find the number which completes a proportion
(13) b. Identify place value in decimal numerals
(14) c. Determine the correct ordering of a set of rational numbers
(15) d. Identify a set of prime numbers or the prime factorization of a number
(16) e. Demonstrate an understanding of scientific notation
(17) f. Round decimal numerals
(18) g. Demonstrate an understanding of set theory
(19) h. Demonstrate an understanding of fraction/decimal/percent equivalency
(20) i. Estimate using the sums, differences, products, quotients and square roots

V. Measurement and Geometry

(21) a. Add, subtract, multiply, and divide measures using metric and U.S. standard units
(22) b. Identify and define acute, obtuse and right angles
(23) c. Demonstrate an understanding of complementary/supplementary angles
(24) d. Demonstrate an understanding that the sum of the measures of the angles of a triangle is 180 degrees
(25) e. Find the volume of a cylinder, cone, pyramid, rectangular solid or sphere
(26) f. Find the perimeter of a polygon
(27) g. Compute the area of a specified region
(28) h. Compute the area of an irregular figure

(29) i. Identify similar figures
(30) j. Identify points on a coordinate plane
(31) k. Demonstrate an understanding of parallel and perpendicular lines

VI. Pre-Algebra

(32) a. Evaluate an expression
(33) b. Simplify an expression
(34) c. Solve an equation using multiple operations
(35) d. Perform arithmetic operations on signed numbers

VII. Problem Solving

(36) a. Read and interpret data from graphs
(37) b. Estimate the shortest route between two points
(38) c. Compare the percent and the fraction discount
(39) d. Solve a percent problem involving sales tax
(40) e. Solve a problem involving percent
(41) f. Solve a probability problem
(42) g. Identify the missing number of a set given the average and the other number values and compute the average of a series of numbers
(43) h. Solve a problem involving proportions
(44) i. Solve a word problem involving area and/or money
(45) j. Solve a problem involving time and/or temperatures

SOFTWARE

USING THE MATRICES

To use the matrices on pages 15-7 and 47-49, match the grade level (listed across the top of the matrix) to the HSPT skill (listed in the left-hand column). The numbers in the corresponding box on the array represent the computer or video programs appropriate for use at that grade level. Refer to the numerical listing of software and video programs to find descriptions of the specific programs numbered on the matrix.

SKILLS ARRAY
MATHEMATICS SOFTWARE AND THE HSPT

GRADE	4	5	6	7	8	9	10	11	12
COMPUTATION FRACTIONS									
I	18, 21, 22, 38, 48, 49, 50, 55, 58, 71, 76, 80, 86, 94	18, 21, 22, 38, 48, 49, 50, 55, 58, 71, 76, 80, 86, 94	3, 18, 21, 22, 33, 38, 40, 48, 49, 50, 55, 58, 62, 71, 72, 76, 80, 81, 86, 94	3, 18, 21, 22, 33, 38, 40, 48, 49, 55, 62, 72, 76, 80, 81, 86, 94	3, 10, 18, 21, 22, 23, 33, 38, 40, 48, 49, 55, 62, 72, 76, 80, 81, 86, 94	3, 10, 21, 22, 23, 33, 38, 40, 55, 62, 72, 94	3, 10, 23, 33, 40, 62, 72	10, 23, 33, 40, 62, 72	10, 23, 33, 40, 62, 72
Ia	51, 52	51, 52	51, 52	51, 52	51, 52				
Ib		97	97	97	97				
Ic									
Id	53	53, 83	53, 83	53	53, 83				
Ie	53	31, 53	31, 53	, 53	31, 53				
COMPUTATION DECIMALS									
II	16, 18, 21, 22, 25, 27, 47, 55, 58, 71, 80, 86, 94	16, 18, 21, 22, 25, 27, 47, 55, 58, 71, 80, 86, 94	3, 16, 18, 21, 22, 25, 26, 27, 33, 40, 47, 55, 58, 62, 71, 72, 80, 86, 94, 99	3, 18, 21, 22, 23, 25, 26, 27, 33, 40, 47, 55, 62, 72, 80, 86, 94, 99	3, 11, 18, 21, 22, 23, 25, 26, 27, 33, 40, 47, 55, 62, 72, 80, 86, 94, 99	3, 11, 21, 22, 23, 26, 33, 40, 55, 62, 72, 94, 99	3, 11, 23, 26, 33, 40, 62, 72, 99	11, 23, 26, 33, 40, 62, 72, 99	11, 23, 26, 33, 40, 62, 72, 99
IIa		1, 98	1, 28, 79, 98	1, 28, 79, 98	1, 28, 79, 98	79	79		
IIb		84	28, 79, 84	28, 79, 84	28, 79, 84	79	79		
IIc		30	28, 30, 79	28, 30, 79	20, 28, 30, 79	20, 79	20, 79	20	20
COMPUTATION PERCENTS									
III	18, 22, 71, 80	18, 22, 71, 80, 89	3, 18, 22, 62, 71, 72, 80, 89, 96	3, 18, 22, 62, 72, 80, 89, 96	3, 12, 18, 22, 23, 62, 70, 72, 80, 89, 96	3, 12, 22, 23, 62, 67, 70, 72, 89, 96	3, 12, 23, 62, 67, 70, 72, 89, 96	12, 23, 62, 67, 70, 72, 89, 96	12, 23, 62, 67, 70, 72, 89, 96
IIIa			79	79	79	79	79		
IIIb			79	79	79	79	79		
IIIc			79	79	79	79	79		

GRADE	4	5	6	7	8	9	10	11	12
NUMBER CONCEPTS									
IV	22, 66, 100	22, 66, 100	13, 22, 66, 79, 100	13, 22, 66, 79, 100	12, 13, 22, 23, 66, 70, 79, 100	12, 13, 22, 23, 66, 67, 70, 79, 100	12, 13, 23, 66, 67, 70, 79, 100	12, 13, 23, 66, 67, 70, 100	12, 13, 23, 66, 67, 70, 100
IVa	91	90, 91	90, 91, 96	90, 91, 96	90, 91, 96	90, 96	91, 96	90, 96	90, 96
IVb	21, 29, 58, 73, 85	21, 29, 58, 73, 85	21, 26, 29, 58, 73, 85	21, 26, 29	21, 26, 29	21, 26	26	26	26
IVc	9, 85	9, 85	2, 9, 26, 85	2, 9, 26	2, 9, 26	9, 26	26	26	26
IVd	32, 34, 37, 73, 94	32, 34, 37, 73, 94	3, 32, 34, 37, 45, 73, 94	3, 34, 37, 45, 88, 94	3, 34, 37, 45, 88, 94	3, 34, 37, 45, 88, 94	3, 34, 37, 45, 88	34, 88	34, 88
IVe			87	87	82, 87	82, 87	82, 87	82, 87	82, 87
IVf	34, 58, 73, 85, 94	34, 58, 73, 85, 94	34, 58, 73, 85, 94	34, 94	34, 94	34, 94	34	34	34
IVg									
IVh	71, 94	71, 94	82, 71, 94, 96	82, 94, 96	82, 94, 96	82, 94, 96	82, 96	82, 96	82, 96
IVi	16, 21, 35, 94	16, 21, 35, 94	16, 21, 35, 42, 87, 94	21, 35, 42, 87, 94	20, 21, 35, 41, 42, 87, 94	20, 21, 35, 41, 42, 87, 94	20, 35, 41, 42, 87	20, 35, 41, 87	20, 35, 41, 87
MEASUREMENT & GEOMETRY									
V	18, 22, 57, 102	18, 22, 57, 102	18, 22, 57, 102	18, 22, 57, 102	12, 18, 22, 23, 43, 56, 57, 70, 102	12, 22, 23, 43, 56, 57, 59, 67, 70	12, 23, 43, 56, 57, 59, 67, 70	12, 23, 43, 56, 57, 59, 67, 70	12, 23, 43, 56, 57, 59, 67, 70
Va	32, 34, 44, 74, 77	32, 34, 44, 74, 77	32, 34, 44, 62, 74, 77, 78, 79, 87	34, 44, 62, 74, 77, 78, 79, 87	10, 11, 34, 44, 62, 74, 77, 78, 79, 87	10, 11, 34, 44, 62, 74, 77, 78, 79, 87	10, 11, 34, 44, 62, 74, 77, 78, 79, 87	10, 11, 34, 44, 62, 74, 78, 87	10, 11, 34, 44, 62, 74, 78, 87
Vb			87	87	87	87	87	87	87
Vc									
Vd			62	62	62	62	62	62	62
Ve			87	87	87	87	87	87	87
Vf	75	75	62, 75, 87, 99	62, 75, 87, 99	62, 75, 87, 99	62, 75, 87, 99	62, 75, 87, 99	62, 75, 87, 99	62, 75, 87, 99
Vg	75	75	62, 75	62, 75	62, 75	62, 75	62, 75	62, 75	62, 75
Vh	75	75	75	75	75	75	75	75	75
Vi									
Vj	15, 37	14, 15, 37	14, 15, 37, 60, 87	5, 15, 24, 37, 60, 87	5, 8, 15, 24, 37, 60, 87	5, 8, 15, 24, 37, 60, 87	5, 8, 15, 24, 37, 60, 87	5, 8, 15, 24, 87	5, 8, 15, 87
Vk	36	36	36	36	36				

GRADE	4	5	6	7	8	9	10	11	12
PRE-ALGEBRA									
VI	18, 22, 55, 60	18, 22, 55, 60	18, 22, 40, 55, 60	18, 22, 40, 54, 55, 68, 60	4, 6, 7, 12, 18, 22, 23, 40, 54, 55, 63, 66, 70, 80, 101	4, 6, 7, 12, 22, 23, 40, 54, 55, 63, 67, 68, 70, 101	4, 6, 7, 12, 23, 40, 54, 63, 67, 68, 70, 101	4, 6, 7, 12, 23, 40, 54, 63, 67, 68, 70, 101	4, 6, 7, 12, 23, 40, 54, 63, 67, 68, 70, 101
VIa			13, 62	13, 62, 65	13, 62, 65	13, 62, 65	13, 62, 65	13, 62, 65	13, 62, 65
VIb			13, 87	13, 65, 87	13, 65, 87	13, 65, 87	13, 65, 87	13, 65, 87	13, 65, 87
VIc				39, 65	39, 65	39, 65	39, 65	39, 65	65
VId			87	87	87	87	87	87	87
PROBLEM SOLVING									
VII	17, 22, 46, 61, 91, 100	17, 22, 46, 61, 89, 91, 100	17, 22, 46, 61, 89, 91, 100	17, 22, 46, 61, 64, 89, 91, 92, 95, 96, 100	12, 17, 22, 23, 46, 61, 64, 70, 89, 91, 92, 93, 95, 96, 100	12, 17, 22, 23, 46, 61, 64, 67, 70, 89, 92, 93, 95, 96, 100	12, 17, 23, 46, 64, 67, 70, 89, 92, 93, 95, 96, 100	12, 17, 23, 46, 64, 67, 70, 89, 92, 93, 95, 96, 100	12, 17, 23, 46, 64, 67, 70, 89, 93, 95, 96, 100
VIIa			79, 87	79, 87	19, 79, 87	19, 79, 87	19, 79, 87	19, 87	19, 87
VIIb									
VIIc									
VIId									
VIIe					11	11	11	11	11
VIIf									
VIIg	9	9	9	9	9	9			
VIIh									
VIIi	34, 89	34, 89	34, 89	34, 89	11, 20, 34, 89	11, 20, 34	11, 20, 34	11, 20, 34	11, 20, 34
VIIj			87, 99	87, 99	87, 99	87, 99	87, 99	87, 99	87, 99

SOFTWARE LISTINGS

1. Title: **ADDING DECIMALS***
   Grade Level(s): 5, 6, 7, 8
   Group Size: individual, small group
   Instructional Mode: drill and practice
   System Requirement: Apple, Commodore 64
   Producer: Microcomputer Workshops Courseware
   HSPT Skill(s): IIa

2. Title: **ADVANCED GUESS MY FRACTION***
   Grade Level(s): 6, 7, 8
   Group Size: individual
   Instructional Mode: drill and practice
   System Requirements: Apple
   Producer: National Council of Teachers of Mathematics
   HSPT Skill(s): IVc

3. Title: **ADVANCED MATH SKILLS***
   Grade Level(s): 6, 7, 8, 9, 10
   Group Size: individual, small group
   Instructional Mode: educational game, drill and practice
   System Requirements: Apple
   Producer: Random House School Division
   HSPT Skill(s): I, II, III, IVd

4. Title: **ALGEBRA 1** and **ALGEBRA 2***
   Grade Level(s): 8, 9, 10, 11, 12
   Group Size: individual, small group
   Instructional Mode: drill and practice, tutorial
   System Requirements: Apple
   Producer: Edu-Ware Services, Inc.
   HSPT Skill(s): VI

5. Title: **ALGEBRA ARCADE***
   Grade Level(s): 7, 8, 9, 10, 11, 12
   Group Size: individual, small group
   Instructional Mode: tutorial, drill and practice, educational game
   System Requirements: Apple
   Producer: Wadsworth Electronic Publishing Corp.
   HSPT skill(s): Vj

6. Title: **ALGEBRA BILLIARDS**
   Grade Level(s): 8, 9, 10, 11, 12
   Group Size: individual
   Instructional Mode: drill and practice, educational game
   System Requirements: TRS-80, Apple, IBM/PC
   Producer: Curriculum Applications
   HSPT Skill(s): VI

* Available for preview at ETTCs.

7. Title: **ALGEBRA DRILL AND PRACTICE I AND II**
   Grade Level(s): 8, 9, 10, 11, 12
   Group Size: individual, small group
   Instructional Mode: drill and practice, enrichment, tutorial
   System Requirements: Apple
   Producer: Conduit
   HSPT Skill(s): VI

8. Title: **ALGEBRA, ELECTRONIC BLACKBOARD SERIES**
   Grade Level(s): 8, 9, 10, 11, 12
   Group Size: individual, small group
   Instructional Mode: drill and practice, tutorial
   System Requirements: Apple
   Producer: Wadsworth Electronic Publishing Corp.
   HSPT Skill(s): Vj

9. Title: **ARITH-MAGIC**
   Grade Level(s): 4, 5, 6, 7, 8, 9
   Group Size: individual, small group
   Instructional Mode: educational game
   System Requirements: Apple, TRS-80, Commodore 64, PET
   Producer: Quality Educational Designs
   HSPT Skill(s): IVc, VIIg

10. Title: **AUTOMOTIVE TECHNICIAN MATHEMATICS (Vol. 1)***
    Grade Level(s): 8, 9, 10, 11, 12
    Group Size: individual, small group, large group
    Instructional Mode: enrichment
    System Requirements: Apple
    Producer: MECC
    HSPT Skill(s): I, Va

11. Title: **AUTOMOTIVE TECHNICIAN MATHEMATICS (Vol. 2)***
    Grade Level(s): 8, 9, 10, 11, 12
    Group Size: individual, small group, large group
    Instructional Mode: enrichment
    System Requirements: Apple
    Producer: MECC
    HSPT Skill(s): II, Va, VIIe, VIIi

12. Title: **BARRON'S COMPUTER STUDY PROGRAM FOR THE SAT***
    Grade Level(s): 8, 9, 10, 11, 12
    Group Size: individual
    Instructional Mode: drill and practice, SAT review
    System Requirements: Apple, Commodore 64, IBM/PC
    Producer: Barron's Educational Series, Inc.
    HSPT Skill(s): III, IV, V, VI, VII

* Available for preview at ETTCs.

13. Title: **BASIC NUMBER CONCEPTS**
Grade Level(s): 6, 7, 8, 9, 10, 11, 12
Group Size: individual, small group
Instructional Mode: drill and practice, tutorial, remedial
System Requirements: IBM/PC, PC/JR
Producer: International Business Machines Corporation
HSPT Skill(s): IV, VIa, VIb

14. Title: **BUMBLE GAMES**
Grade Level(s): 5, 6
Group Size: individual, small group
Instructional Mode: educational game
System Requirements: Apple, Commodore 64, TRS-COLOR, Atari
Producer: The Learning Company
HSPT Skill(s): Vj

15. Title: **BUMBLE PLOT***
Grade Level(s): 4, 5, 6, 7, 8, 9, 10, 11, 12
Group Size: individual, small group
Instructional Mode: educational game
System Requirements: Apple, TRS-COLOR
Producer: The Learning Company
HSPT Skill(s): Vj

16. Title: **CHALLENGE MATH**
Grade Level(s): 4, 5, 6
Group Size: individual, small group
Instructional Mode: drill and practice, educational game
System Requirements: Apple, Commodore 64
Producer: Sunburst Communications, Inc.
HSPT Skill(s): II, IVi

17. Title: **COMP-U-SOLVE**
Grade Level(s): 4, 5, 6, 7, 8, 9, 10, 11, 12
Group Size: individual, small group
Instructional Mode: educational game, enrichment
System Requirements: Apple, TRS-80, Commodore 64
Producer: Educational Activities, Inc.
HSPT Skill(s): VII

18. Title: **COMPUTER DRILL AND INSTRUCTION: MATHEMATICS A, B, C, D**
Grade Level(s): 4, 5, 6, 7, 8
Group Size: individual, small group
Instructional Mode: drill and practice
System Requirements: Apple, Atari
Producer: Science Research Associates
HSPT Skill(s): I, II, III, V, VI

* Available for preview at ETTCs.

19. Title: **COMPUTER GENERATED MATHEMATICS MATERIALS (Vol. 1)***
Grade Level(s): 8, 9, 10, 11, 12
Group Size: individual, small group, large group
Instructional Mode: drill and practice
System Requirements: Apple
Producer: MECC
HSPT Skill(s): VIIa

20. Title: **COMPUTER GENERATED MATHEMATICS (Vol. 2)***
Grade Level(s): 8, 9, 10, 11, 12
Group Size: individual, small group
Instructional Mode: drill and practice
System Requirements: Apple
Producer: MECC
HSPT Skill(s): IIc, IVi, VIIi

21. Title: **COMPUTER MATH GAMES, VOLUMES 1 to 7**
Grade Level(s): 4, 5, 6, 7, 8, 9
Group Size: individual, small group
Instructional Mode: drill and practice, educational game
System Requirements: Apple
Producer: Addison-Wesley Publishing Company
HSPT Skill(s): I, II, IVb, IVi

22. Title: **COMPUTER MATH ACTIVITIES, VOLUMES 1 to 5**
Grade Level(s): 4, 5, 6, 7, 8, 9
Group Size: individual, small group
Instructional Mode: drill and practice, educational game
System Requirements: Apple
Producer: Addison-Wesley Publishing Company
HSPT Skill(s): I, II, III, IV, V, VI, VII

23. Title: **COMPUTER STUDY PROGRAM FOR THE H.S.P.T.**
Grade Level(s): 8, 9, 10, 11, 12
Group Size: individual, small group
Instructional Mode: drill and practice, tutorial
System Requirements: Apple
Producer: Instructivision, Inc.
HSPT Skill(s): I, II, III, IV, V, VI, VII

24. Title: **COORDINATE***
Grade Level(s): 7, 8, 9, 10, 11
Group Size: individual, small group
Instructional Mode: drill and practice
System Requirements: Apple, Commodore 64, PET
Producer: Microcomputer Workshops Courseware
HSPT Skill(s): Vj

* Available for preview at ETTCs.

25. Title: **DECIMAL ESTIMATION**
Grade Level(s): 4, 5, 6, 7, 8
Group Size: individual, small group
Instructional Mode: drill and practice
System Requirements: Apple, Atari, Commodore 64, PET, TRS-80
Producer: School and Home Courseware, Inc.
HSPT Skill(s): II

26. Title: **DECIMAL SKILLS**
Grade Level(s): 6, 7, 8, 9, 10, 11, 12
Group Size: individual, small group
Instructional Mode: drill and practice
System Requirements: Apple
Producer: Milton Bradley Company
HSPT Skill(s): II, IVb, IVc

27. Title: **DECIMALS**
Grade Level(s): 4, 5, 6, 7, 8
Group Size: individual, small group
Instructional Mode: educational game, tutorial
System Requirements: Apple, Commodore 64, PET, TRS-80
Producer: Quality Educational Designs
HSPT Skill(s): II

28. Title: **DECIMALS***
Grade Level(s): 6, 7, 8
Group Size: individual, small group
Instructional Mode: drill and practice
System Requirements: Apple, IBM/PC
Producer: Sterling Swift Publishing Co.
HSPT Skill(s): IIa, IIb, IIc

29. Title: **DECIMALS: PRACTICE**
Grade Level(s): 4, 5, 6, 7, 8
Group Size: individual, small group
Instructional Mode: drill and practice, educational game
System Requirements: Apple, Atari, TI-99
Producer: Plato Educational Software
HSPT Skill(s): IVb

30. Title: **DIVIDING DECIMALS***
Grade Level(s): 5, 6, 7, 8
Group Size: individual, small group
Instructional Mode: drill and practice
System Requirements: Apple, Commodore 64
Producer: Microcomputer Workshops Courseware
HSPT Skill(s): IIc

*Available for preview at ETTCs.

31. Title: **DIVIDING FRACTIONS***
Grade Level(s): 5, 6, 7, 8
Group Size: individual, small group
Instructional Mode: drill and practice
System Requirements: Apple
Producer: Microcomputer Workshops Courseware
HSPT Skill(s): Ie

32. Title: **ELEMENTARY MATH**
Grade Level(s): 4, 5, 6
Group Size: individual, small group
Instructional Mode: drill and practice, educational game
System Requirements: Apple
Producer: T.I.E.S
HSPT Skill(s): IVd, Va

33. Title: **ELEMENTARY MATHEMATICS CLASSROOM LEARNING SYSTEM**
Grade Level(s): 6, 7, 8, 9, 10, 11, 12
Group Size: individual, small group
Instructional Mode: drill and practice
System Requirements: Apple
Producer: Sterling Swift Publishing Co.
HSPT Skill(s): I, II

34. Title: **ELEMENTARY VOLUME 1 MATHEMATICS (Games and Drill)***
Grade Level(s): 4, 5, 6, 7, 8, 9, 10, 11, 12
Group Size: individual, small group
Instructional Mode: drill and practice
System Requirements: Apple, Atari, Commodore 64
Producer: MECC
HSPT Skill(s): IVd, IVf, Va, VIIi

35. Title: **ELEMENTARY VOLUME 4***
Grade Level(s): 4, 5, 6, 7, 8, 9, 10, 11, 12
Group Size: individual, small group
Instructional Mode: drill and practice, educational games
System Requirements: Apple, Atari, Commodore 64, TRS-80
Producer: MECC
HSPT Skill(s): IVi

36. Title: **ELEMENTARY MATH VOLUME 9 GEOMETRY***
Grade Level(s): 4, 5, 6, 7, 8
Group Size: individual, small group
Instructional Mode: remediation
System Requirements: Apple
Producer: MECC
HSPT Skill(s): Vk

*Available for preview at ETTCs.

37. Title: **ELEMENTARY MATH LOGIC***
Grade Level(s): 4, 5, 6, 7, 8, 9, 10
Group Size: individual, small group
Instructional Mode: drill and practice, educational game
System Requirements: Commodore 64
Producer: MECC
HSPT Skill(s): IVd, Vj

38. Title: **EMSI-6**
Grade Level(s): 4, 5, 6, 7, 8, 9
Group Size: individual, small group
Instructional Mode: drill & practice, remediation
System Requirements: TRS-80
Producer: Educational Micro Systems, Inc.
HSPT Skill(s): I

39. Title: **EQUATIONS***
Grade Level(s): 7, 8, 9, 10, 11
Group Size: individual, small group
Instructional Mode: drill and practice
System Requirements: Apple
Producer: Microcomputer Workshops Courseware
HSPT Skill(s): VIc

40. Title: **ESSENTIAL MATH PROGRAM II**
Grade Level(s): 6, 7, 8, 9, 10, 11, 12
Group Size: individual, small group, large group
Instructional Mode: drill and practice
System Requirements: TRS-80
Producer: Radio Shack Education Division
HSPT Skill(s): I, II, VI

41. Title: **ESTIMATING***
Grade Level(s): 8, 9, 10, 11, 12
Group Size: individual, small group, large group
Instructional Mode: drill and practice
System Requirements: Apple
Producer: MECC
HSPT Skill(s): IVi

42. Title: **ESTIMATING DRILL**
Grade Level(s): 6, 7, 8, 9, 10
Group Size: individual, small group
Instructional Mode: drill and practice
System Requirements: TRS-80
Producer: Edu-Soft
HSPT Skill(s): IVi

*Available for preview at ETTCs.

43. Title: **EUCLID GEOMETRY TUTOR**
Grade Level(s): 8, 9, 10, 11, 12
Group Size: individual, small group
Instructional Mode: enrichment
System Requirements: TRS-80
Producer: Radio Shack Education Division
HSPT Skill(s): V

44. Title: **EXPLORER METROS: A METRIC ADVENTURE**
Grade Level(s): 4, 5, 6, 7, 8, 9, 10, 11, 12
Group Size: individual, small group
Instructional Mode: educational game, simulation
System Requirements: Apple
Producer: Sunburst Communications, Inc.
HSPT Skill(s): Va

45. Title: **FACTORING WHOLE NUMBERS**
Grade Level(s): 6, 7, 8, 9, 10
Group Size: individual, small group
Instructional Mode: drill and practice, educational game
System Requirements: Apple, TRS-80, PET
Producer: Quality Educational Designs
HSPT Skill(s): IVd

46. Title: **THE FACTORY**
Grade Level(s): 4, 5, 6, 7, 8, 9, 10, 11, 12
Group Size: individual, small group
Instructional Mode: drill and practice, educational game
System Requirements: Apple, TRS-80 COLOR, PET, Atari, Commodore 64
Producer: Sunburst Communications, Inc.
HSPT Skill(s): VII

47. Title: **FASTRACK QUIZZER** and **THE GREAT COMPUTER GAMEWORKS**
Grade Level(s): 4, 5, 6, 7, 8
Group Size: individual, small group
Instructional Mode: drill and practice, educational game
System Requirements: Apple
Producer: Creative Publications
HSPT Skill(s): II

48. Title: **FRACTIONS**
Grade Level(s): 4, 5, 6, 7, 8
Group Size: individual, small group
Instructional Mode: drill and practice, educational game, tutorial
System Requirements: Apple, Commodore 64, TRS-80, PET
Producer: Quality Educational Designs
HSPT Skill(s): I

* Available for preview at ETTCs.

49. Title: **FRACTIONS**
Grade Level(s): 4, 5, 6, 7, 8
Group Size: individual, small group
Instructional Mode: drill and practice, remediation
System Requirements: Apple
Producer: Edu-Ware Services, Inc.
HSPT Skill(s): I

50. Title: **FRACTIONS**
Grade Level(s): 4, 5, 6
Group Size: individual, small group
Instructional Mode: drill and practice
System Requirements: TI-99
Producer: Scott, Foresman and Company
HSPT Skill(s): I

51. Title: **FRACTIONS-ADDITION AND SUBTRACTION***
Grade Level(s): 4, 5, 6, 7, 8
Group Size: individual
Instructional Mode: drill and practice
System Requirements: Apple, IBM/PC
Producer: Courses by Computers, Inc.
HSPT Skill(s): Ia

52. Title: **FRACTIONS-BASIC CONCEPTS***
Grade Level(s): 4, 5, 6, 7, 8
Group Size: individual
Instructional Mode: drill and practice
System Requirements: Apple
Producer: Courses by Computers, Inc.
HSPT Skill(s): Ia

53. Title: **FRACTIONS-MULTIPLICATION AND DIVISION***
Grade Level(s): 4, 5, 6, 7, 8
Group Size: individual
Instructional Mode: drill and practice
System Requirements: Apple, IBM/PC
Producer: Courses by Computers, Inc.
HSPT Skill(s): Id, Ie

54. Title: **THE FUNCTION GAME***
Grade Level(s): 7, 8, 9, 10, 11, 12
Group Size: individual, small group
Instructional Mode: educational game
System Requirements: Apple
Producer: MUSE Software
HSPT Skill(s): VI

* Available for preview at ETTCs.

55. Title: **FUNDAMENTAL MATH DRILL/PRACTICE I-IV**
Grade Level(s): 4, 5, 6, 7, 8, 9
Group Size: individual, small group
Instructional Mode: drill and practice
System Requirements: TRS-80 Apple
Producer: Random House School Division
HSPT Skill(s): I, II, VI

56. Title: **GEOMETRY AND MEASUREMENT-DRILL AND PRACTICE**
Grade Level(s): 8, 9, 11, 12
Group Size: individual, small group
Instructional Mode: drill and practice
System Requirements: Apple
Producer: Apple Computer, Inc.
HSPT Skill(s): V

57. Title: **GEOMETRY ALIVE**
Grade Level(s): 4, 5, 6, 7, 8, 9, 10, 11, 12
Group Size: individual, small group
Instructional Mode: drill and practice
System Requirements: Apple
Producer: Educational Activities, Inc.
HSPT Skill(s): V

58. Title: **GRAND PRIX***
Grade Level(s): 4, 5, 6
Group Size: small group
Instructional Mode: drill and practice, educational game
System Requirements: Apple, Atari
Producer: Random House School Division
HSPT Skill(s): I, II, IVb, IVf

59. Title: **GRAPHING EQUATIONS**
Grade Level(s): 9, 10, 11, 12
Group Size: small group
Instructional Mode: individual, small group
System Requirements: Apple
Producer: Conduit
HSPT Skill(s): V, VI

60. Title: **GUESSING AND THINKING***
Grade Level(s): 6, 7, 8, 9, 10
Group Size: individual, small group
Instructional Mode: drill and practice, educational game
System Requirements: Apple, Commodore 64, Atari
Producer: MECC
HSPT Skill(s): Vj

* Available for preview at ETTCs.

61. Title: **QUINNESS WORLD RECORDS PROBLEM AREAS IN MATH**
Grade Level(s): 4, 5, 6, 7, 8, 9
Group Size: individual, small group
Instructional Mode: drill and practice, tutorial, educational game
System Requirements: Apple
Producer: Society for Visual Education
HSPT Skill(s): VII

62. Title: **HIGH SCHOOL MATH COMPETENCY***
Grade Level(s): 6, 7, 8, 9, 10, 11, 12
Group Size: individual, small group
Instructional Mode: drill and practice
System Requirements: Apple, TRS-80
Producer: Microcomputer Workshops Courseware
HSPT Skill(s): I, II, III, IVh, Va, Vd, Vf, Vg, VIa

63. Title: **INTERMEDIATE ALGEBRA***
Grade Level(s): 8, 9, 10, 11, 12
Group Size: individual, small group
Instructional Mode: enrichment
System Requirements: Apple
Producer: Avant-Garde Publishing Corporation
HSPT Skill(s): VI

64. Title: **INTERPRETING GRAPHS**
Grade Level(s): 7, 8, 9, 10, 11, 12
Group Size: individual, small group
Instructional Mode: drill and practice, educational game
System Requirements: Apple
Producer: Apple
HSPT Skill(s): VII

65. Title: **INTRODUCTORY ALGEBRA***
Grade Level(s): 7, 8, 9, 10, 11, 12
Group Size: individual, small group
Instructional Mode: drill and practice
System Requirements: Apple
Producer: Avant-Garde Publishing Corporation
HSPT Skill(s): VIa, VIb, VIc

66. Title: **THE KING'S RULE**
Grade Level(s): 4, 5, 6, 7, 8, 9, 10, 11, 12
Group Size: individual, small group
Instructional Mode: educational game
System Requirements: Apple, Commodore 64, TRS-80
Producer: Sunburst Communications, Inc.
HSPT Skill(s): IV

* Available for preview at ETTCs.

67. Title: **KRELL'S COLLEGE BOARD SAT**
Grade Level(s): 9, 10, 11, 12
Group Size: individual
Instructional Mode: tutorial, SAT review
System Requirements: Software Corporation
Producer: Sunburst Communications, Inc.
HSPT Skill(s): III, IV, V, VI, VII

68. Title: **LESSONS IN ALGEBRA VERSION 3**
Grade Level(s): 7, 8, 9, 10, 11, 12
Group Size: individual, small group, large group
Instructional Mode: drill and practice, tutorial
System Requirements: Apple
Producer: George Earl
HSPT Skill(s): VI

69. Title: **THE MAGIC CASH REGISTER***
Grade Level(s): 4, 5, 6, 7, 8
Group Size: individual, small group
Instructional Mode: enrichment
System Requirements: Apple
Producer: Avant-Garde Publishing Corporation
HSPT Skill(s): VIIi

70. Title: **MASTERING THE SAT***
Grade Level(s): 8, 9, 10, 11, 12
Group Size: individual
Instructional Mode: drill and practice, SAT review
System Requirements: Apple, IBM/PC, PC/JR, Commodore 64
Producer: CBS Software
HSPT Skill(s): III, IV, V, VI, VII

71. Title: **MATH BLASTER**
Grade Level(s): 4, 5, 6
Group Size: individual
Instructional Mode: educational game, drill and practice
System Requirements: Apple
Producer: Davidson and Associates
HSPT Skill(s): I, II, III, IVh

72. Title: **MATH COMPUTATION SKILLS**
Grade Level(s): 6, 7, 8, 9, 10, 11, 12
Group Size: individual, small group
Instructional Mode: drill and practice, tutorial, remedial
System Requirements: IBM/PC, PC/JR
Producer: International Business Machines Corporation
HSPT Skill(s): I, II, III

* Available for preview at ETTCs.

73. Title: **MATH CONCEPTS**
Grade Level(s): 4, 5, 6
Group Size: individual, small group
Instructional Mode: drill and practice, remediation
System Requirements: Apple
Producer: Hartley Courseware, Inc.
HSPT Skill(s): IVb, IVd, IVf

74. Title: **MATHEMATICS VOLUME 2 (Measurement)***
Grade Level(s): 4, 5, 6, 7, 8, 9, 10, 11, 12
Group Size: individual, small group
Instructional Mode: drill and practice, educational games
System Requirements: Apple, TRS-80
Producer: MECC
HSPT Skill(s): Va

75. Title: **MATHEMATICS VOLUME 3 (Geometry)***
Grade Level(s): 4, 5, 6, 7, 8, 9, 10, 11, 12
Group Size: individual, small group
Instructional Mode: drill and practice, remediation, educational games
System Requirements: Apple
Producer: MECC
HSPT Skill(s): Vf, Vg, Vh

76. Title: **MATHWIZ**
Grade Level(s): 4, 5, 6, 7, 8
Group Size: individual, small group
Instructional Mode: drill and practice, tutorial
System Requirements: Commodore 64, PET
Producer: Merritt Software, Inc.
HSPT Skill(s): I

77. Title: **METRIC MATH** (3 programs)*
Grade Level(s): 4, 5, 6, 7, 8, 9, 10
Group Size: individual, small group
Instructional Mode: drill and practice
System Requirements: Commodore 64, Apple, Atari
Producer: MECC
HSPT Skill(s): Va

78. Title: **METRIC SYSTEM TUTOR**
Grade Level(s): 6, 7, 8, 9, 10, 11, 12
Group Size: individual, small group
Instructional Mode: drill and practice, tutorial
System Requirements: Apple
Producer: Cygnus Software
HSPT Skill(s): Va

* Available for preview at ETTCs.

79. Title: **MICROCOMPUTER CURRICULUM PROJECT**
Grade Level(s): 6, 7, 8, 9, 10
Group Size: individual, small group
Instructional Mode: drill and practice
System Requirements: Apple
Producer: Microcomputer Curriculum Project: Price Laboratory School
HSPT Skill(s): IIa, IIb, IIc, IIIa, IIIb, IIIc, IV, Va, VIIa

80. Title: **MILLIKEN MATH SEQUENCES**
Grade Level(s): 4, 5, 6, 7, 8
Group Size: individual, small group
Instructional Mode: drill and practice
System Requirements: Apple, Atari
Producer: Milliken Publishing Company
HSPT Skill(s): I, II, III, VI

81. Title: **MIXED NUMBERS**
Grade Level(s): 6, 7, 8
Group Size: individual, small group
Instructional Mode: drill and practice, tutorial
System Requirements: Apple
Producer: Milton Bradley Company
HSPT Skill(s): I

82. Title: **MORE POWER TO YOU***
Grade Level(s): 8, 9, 10, 11, 12
Group Size: individual, small group
Instructional Mode: drill and practice
System Requirements: Apple
Producer: Micro Lab
HSPT Skill(s): IVe

83. Title: **MULTIPLYING FRACTIONS***
Grade Level(s): 5, 6, 7, 8
Group Size: individual, small group
Instructional Mode: drill and practice, remediation
System Requirements: Apple, Atari, IBM/PC, TRS-80
Producer: Microcomputer Workshops Courseware
HSPT Skill(s): Id

84. Title: **MULTIPLYING DECIMALS***
Grade Level(s): 5, 6, 7, 8
Group Size: individual, small group
Instructional Mode: drill and practice
System Requirements: Apple, Commodore 64
Producer: Microcomputer Workshops Courseware
HSPT Skill(s): IIb

* Available for preview at ETTCs.

85. Title: **NUMERATION 2**
Grade Level(s): 4, 5, 6
Group Size: individual, small group
Instructional Mode: drill and practice, remediation
System Requirements: TI-99, Apple
Producer: Scott, Foresman and Company
HSPT Skill(s): IVb, IVc, IVf

86. Title: **THE PET PROFESSOR**
Grade Level(s): 4, 5, 6, 7, 8
Group Size: individual, small group
Instructional Mode: drill and practice
System Requirements: PET, Commodore 64
Producer: Cow Bay Computing
HSPT Skill(s): I, II

87. Title: **PREPARING FOR GEOMETRY AND ALGEBRA**
Grade Level(s): 6, 7, 8, 9, 10, 11, 12
Group Size: individual, small group
Instructional Mode: drill and practice, tutorial, remedial
System Requirements: IBM/PC, PC/JR
Producer: International Business Machines Corporation
HSPT Skill(s): IVe, IVi, Va, Vb, Ve, Vf, Vj, VIb, VId, VIIa, VIIj

88. Title: **PRIME NUMBERS***
Grade Level(s): 7, 8, 9, 10, 11, 12
Group Size: individual, small group, large group
Instructional Mode: drill and practice
System Requirements: Apple
Producer: MECC
HSPT Skill(s): IVd

89. Title: **PURCHASE POWER**
Grade Level(s): 5, 6, 7, 8, 9, 10, 11, 12
Group Size: individual, small group
Instructional Mode: tutorial, drill and practice
System Requirements: Apple
Producer: Computer Age Education, Inc.
HSPT Skill(s): III, VII

90. Title: **RATIO AND PROPORTION**
Grade Level(s): 5, 6, 7, 8, 9, 10, 11, 12
Group Size: individual, small group
Instructional Mode: drill and practice, tutorial
System Requirements: Apple
Producer: Educational Activities, Inc.
HSPT Skill(s): IVa

* Available for preview at ETTCs.

91. Title: **RATIOS AND PROPORTION**
Grade Level(s): 4, 5, 6, 7, 8
Group Size: individual, small group
Instructional Mode: drill and practice
System Requirements: Apple
Producer: Milton Bradley Company
HSPT Skill(s): IVa, VII

92. Title: **READ AND SOLVE MATH PROBLEMS I**
Grade Level(s): 6, 7, 8, 9, 10, 11
Group Size: individual, small group
Instructional Mode: drill and practice, remedial, tutorial
System Requirements: Apple, Atari, PET, TRS-80
Producer: Educational Activities, Inc.
HSPT Skill(s): VII

93. Title: **READ AND SOLVE MATH PROBLEMS II**
Grade Level(s): 8, 9, 10, 11, 12
Group Size: individual, small group
Instructional Mode: drill and practice
System Requirements: Apple, Commodore, TRS-80
Producer: Educational Activities, Inc.
HSPT Skill(s): VII

94. Title: **SALINA MATH GAMES**
Grade Level(s): 4, 5, 6, 7, 8, 9
Group Size: individual, small group
Instructional Mode: tutorial, educational game
System Requirements: Apple, TRS-80
Producer: Educational Activities, Inc.
HSPT Skill(s): I, II, IVd, IVf, IVh, IVi

95. Title: **THE SEMANTIC CALCULATOR (SemCale)**
Grade Level(s): 6, 7, 8, 9, 10, 11, 12
Group Size: individual, small group
Instructional Mode: educational game, tutorial
System Requirements: Apple, Atari, TRS-80
Producer: Sunburst Communications, Inc.
HSPT Skill(s): VII

96. Title: **SOLVING MATH WORD PROBLEMS**
Grade Level(s): 6, 7, 8, 9, 10, 11, 12
Group Size: individual, small group
Instructional Mode: drill and practice, tutorial, remedial
System Requirements: IBM/PC, PC/JR
Producer: International Business Machines Corporation
HSPT Skill(s): III, IVa, IVh, VII

* Available for preview at ETTCs.

97. Title: **SUBTRACTING MIXED FRACTIONS***
Grade Level(s): 5, 6, 7, 8
Group Size: individual, small group
Instructional Mode: drill and practice
System Requirements: Apple, TRS-80, Atari, IBM/PC, Commodore 64
Producer: Microcomputer Workshops Courseware
HSPT Skill(s): Ib

98. Title: **SUBTRACTING DECIMALS***
Grade Level(s): 5, 6, 7, 8
Group Size: individual, small group
Instructional Mode: drill and practice
System Requirements: Apple, Commodore 64
Producer: Microcomputer Workshops Courseware
HSPT Skill(s): IIa

99. Title: **SURVIVAL MATH***
Grade Level(s): 6, 7, 8, 9, 10, 11, 12
Group Size: individual, small group
Instructional Mode: drill and practice, enrichment, educational games
System Requirements: Apple, Commodore 64, Atari, TRS-80
Producer: Sunburst Communications, Inc.
HSPT Skill(s): II, Vf, VIIj

100. Title: **TEASERS by TOBBS**
Grade Level(s): 4, 5, 6, 7, 8, 9, 10, 11, 12
Group Size: individual, small group
Instructional Mode: enrichment
System Requirements: Apple, Atari, TRS-80, TRS-COLOR
Producer: Sunburst Communications, Inc.
HSPT Skill(s): IV, VII

101. Title: **TOBBS LEARNS ALGEBRA**
Grade Level(s): 8, 9, 10, 11, 12
Group Size: individual, small group
Instructional Mode: educational game, drill and practice
System Requirements: Apple, TRS-80
Producer: Sunburst Communications, Inc.
HSPT Skill(s): VI

102. Title: **TRAP-A-ZOID***
Grade Level(s): 4, 5, 6, 7, 8
Group Size: individual, small group
Instructional Mode: educational game
System Requirements: Apple, Commodore 64, Atari, IBM/PC, PC/JR
Producer: Designware, Inc.
HSPT Skill(s): V

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VIDEO PROGRAMMING

SKILL ARRAY
VIDEO PROGRAMMING

VIDEO—1

GRADE	4	5	6	7	8	9	10	11	12
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Ib	70, 79	70, 79	70, 79						
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Ie									
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IIIb									
IIIc									

GRADE	4	5	6	7	8	9	10	11	12
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GRADE	4	5	6	7	8	9	10	11	12

PRE-ALGEBRA

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VIb									
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CONSUMER SQUAD

"Consumer Squad" is an instructional television series designed to teach consumer rights and responsibilities to middle school students and to develop and improve the skills students need to be effective consumers. It may be used with students to motivate, help develop problem-solving skills, and show the relationship of mathematics to everyday situations.

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MATHWISE

"Mathwise" is designed to help students recognize that important link between mathematics and everyday problems and to increase confidence in using mathematics. The series treats math as a means to practical ends. It shows how mathematics applies to problem solving in the everyday world. Its aim is to help students become "mathwise" - to use their mathematics skills in their own lives.

The programs are organized into four modules based on the mathematics processes of measuring, comparing, locating/interpreting, and predicting. One or more major mathematics topics and one or more problem-solving techniques appear in each program.

Each program includes a documentary segment. The documentaries introduce mathematics skills and illustrate their use in everyday situations. The dramas show teenagers using the same skills to solve problems.

MEASUREMETRIC

"Measuremetric" is an instructional series that uses the metric system in dealing with the process of measurement. The twelve lessons are grouped in four clusters: length, area, volume, and mass. Two other measurement topics, temperature and time, are woven into all 12 lessons. Mathematical skills which correlate to the HSPT objectives are in the areas of measurement and problem solving.

SOLUTIONS UNLIMITED

"Solutions Unlimited" consists of eight instructional units that integrate computer software, video cassettes, and print material to provide structured activities through which students learn and apply problem-solving skills in the areas of mathematics, science, language arts, and social studies.

Mathematical segments include skills in estimating and approximating numerical or qualitative factors related to the dimensions of the problem, such as time or distance. Also included are predicting and estimating relationships from data and the use of graphs. The 15-minute video segments, taken from segments of the series "Think About", serve as a stimulus for each unit.

TAX WHYS: UNDERSTANDING TAXES

"Tax Whys" is designed to introduce some of the major economic issues of taxation in the United States. The series can, through accompanying worksheets and the integration of the Internal Revenue Service's "Understanding Taxes" program, illustrate and provide practice in reading and interpreting data from graphs, solving problems with percent and sales tax, working with proportions, and solving word problems involving money. This incorporates HSPT skills III and VII.

THINKABOUT

"Thinkabout" is a series of 60 programs that helps students acquire and use the skills they must have to be independent learners and problem solvers in the areas of mathematics, language arts, and study skills. Mathematical skills which correlate to the HSPT objectives are in the area of measurement, computation, and graphing.

TRADE-OFFS

"Trade-Offs" is a problem-solving series in economics. Included are segments on creating and interpreting charts, graphs, and grids; estimating and doing mental arithmetic; and using mathematical operations in solving problems involving money.

THE VOYAGE OF THE MIMI

"The Voyage of the Mimi" incorporates an understanding of the principles of science, mathematics, and technology through a problem-solving approach. In the area of mathematics, for example, there are many opportunities to illustrate techniques of measurement, graphical representation, reading and recording data, and the principles of geometry, as well as other topics in mathematics.

The computer interactive software available through Holt, Rinehart, and Winston, simulates many of the activities observed in the video series.

The 26-part series offers 13 dramatic story episodes and 13 companion "expeditions" dealing with the scientific and mathematical concepts encountered in the drama.

VIDEO PROGRAM LISTINGS

1. Title: (series)
   Series: **CHALLENGE OF THE UNKNOWN**
   Lesson: 7 programs
   Grade Level(s): 4, 5, 6, 7, 8, 9, 10, 11, 12
   Length: 20 minutes (each)
   Taping Rights: through June, 1989
   Producers: Playback Associates
   HSPT Skill(s): VII, IVf

2. Title: (series)
   Series: **CONSUMER SQUAD**
   Lesson: 8 programs
   Grade Level(s): 4, 5, 6
   Length: 20 minutes (each)
   Taping Rights: through June, 1986
   Producers: Maryland Instructional Television
   HSPT Skill(s): VII

3. Title: **Tools We Need**
   Series: **FINDING OUR WAY**
   Lesson: 1st of 16
   Grade Level(s): 4, 5, 6, 7, 8, 9
   Length: 15 minutes
   Taping Rights: through June, 1987
   Producers: Western Instructional Television
   HSPT Skill(s): IVb, IVe, Vj, Vk, VIIb

4. Title: **Global Concepts**
   Series: **FINDING OUR WAY**
   Lesson: 2nd of 16
   Grade Level(s): 4, 5, 6, 7, 8, 9
   Length: 15 minutes
   Taping Rights: through June, 1987
   Producers: Western Instructional Television
   HSPT Skill(s): IVb, Vb, Vj, Vk, VIIb

5. Title: **East-West Indies**
   Series: **FINDING OUR WAY**
   Lesson: 3rd of 16
   Grade Level(s): 4, 5, 6, 7, 8, 9
   Length: 15 minutes
   Taping Rights: through June, 1987
   Producers: Western Instructional Television
   HSPT Skill(s): IVb, IVc, IVf, Va, Vj, Vk

6. Title: **North-South Lines**
   Series: **FINDING OUR WAY**
   Lesson: 4th of 16
   Grade Level(s): 4, 5, 6, 7, 8, 9
   Length: 15 minutes
   Taping Rights: through June, 1987
   Producers: Western Instructional Television
   HSPT Skill(s): IVb, IVc, IVf, Va, Vj, Vk

7. Title: **Language of Symbols**
   Series: **FINDING OUR WAY**
   Lesson: 5th of 16
   Grade Level(s): 4, 5, 6, 7, 8, 9
   Length: 15 minutes
   Taping Rights: through June, 1987
   Producers: Western Instructional Television
   HSPT Skill(s): IVb, VIIa

8. Title: **Scaling Down the World**
   Series: **FINDING OUR WAY**
   Lesson: 6th of 16
   Grade Level(s): 4, 5, 6, 7, 8, 9
   Length: 15 minutes
   Taping Rights: through June, 1987
   Producers: Western Instructional Television
   HSPT Skill(s): IVa, IVb, IVe, Va, Vf, Vg, VI, VIIa, VIIh

9. Title: **The Meaning of Relief**
   Series: **FINDING OUR WAY**
   Lesson: 7th of 16
   Grade Level(s): 4, 5, 6, 7, 8, 9
   Length: 15 minutes
   Taping Rights: through June, 1987
   Producers: Western Instructional Television
   HSPT Skill(s): IVb, VIIa

10. Title: **Projecting Our Earth**
    Series: **FINDING OUR WAY**
    Lesson: 8th of 16
    Grade Level(s): 4, 5, 6, 7, 8, 9
    Length: 15 minutes
    Taping Rights: through June, 1987
    Producers: Western Instructional Television
    HSPT Skill(s): IVb, Vj, Vk, VIIb

11. Title: **Using the Globe**
    Series: **FINDING OUR WAY**
    Lesson: 9th of 16
    Grade Level(s): 4, 5, 6, 7, 8, 9
    Length: 15 minutes
    Taping Rights: through June, 1987
    Producers: Western Instructional Television
    HSPT Skill(s): IVa, IVb, Va, Vi, Vj, Vk, VIIa, VIIb, VIIh, VIIi

12. Title: **Reading Maps**
    Series: **FINDING OUR WAY**
    Lesson: 10th of 16
    Grade Level(s): 4, 5, 6, 7, 8, 9
    Length: 15 minutes
    Taping Rights: through June, 1987
    Producers: Western Instructional Television
    HSPT Skill(s): IVa, IVb, Va, Vi, Vj, Vk, VIIa, VIIb, VIIh, VIIi

13. Title: **Maps for Every Purpose**
    Series: **FINDING OUR WAY**
    Lesson: 11th of 16
    Grade Level(s): 4, 5, 6, 7, 8, 9
    Length: 15 minutes
    Taping Rights: through June, 1987
    Producers: Western Instructional Television
    HSPT Skill(s): IVb, Vi, Vj, Vk, VIIa, VIIb, VIIh, VIIi

14. Title: **Atlases Work Wonders**
    Series: **FINDING OUR WAY**
    Lesson: 12th of 16
    Grade Level(s): 4, 5, 6, 7, 8, 9
    Length: 15 minutes
    Taping Rights: through June, 1987
    Producers: Western Instructional Television
    HSPT Skill(s): IVa, IVb, Vi, Vj, Vk, VIIa, VIIb, VIIh, VIIi

15. Title: **Time the World Over**
    Series: **FINDING OUR WAY**
    Lesson: 13th of 16
    Grade Level(s): 4, 5, 6, 7, 8, 9
    Length: 15 minutes
    Taping Rights: through June, 1987
    Producers: Western Instructional Television
    HSPT Skill(s): IVb, Va, Vi, Vj, Vk, VIIa, VIIj

16. Title: **Early Maps and Globes**
    Series: **FINDING OUR WAY**
    Lesson: 14th of 16
    Grade Level(s): 4, 5, 6, 7, 8, 9
    Length: 15 minutes
    Taping Rights: through June, 1987
    Producers: Western Instructional Television
    HSPT Skill(s): IVa, IVb, Vi, Vj, Vk, VIIa, VIIb

17. Title: **How Maps Are Made**
    Series: **FINDING OUR WAY**
    Lesson: 15th of 16
    Grade Level(s): 4, 5, 6, 7, 8, 9
    Length: 15 minutes
    Taping Rights: through June, 1987
    Producers: Western Instructional Television
    HSPT Skill(s): IVa, IVb, Vi, Vj, Vk, VIIa, VIIb

18. Title: **Can You Find Your Way**
    Series: **FINDING OUR WAY**
    Lesson: 16th of 16
    Grade Level(s): 4, 5, 6, 7, 8, 9
    Length: 15 minutes
    Taping Rights: through June, 1987
    Producers: Western Instructional Television
    HSPT Skill(s): IVa, IVb, IVf, Va, Vi, Vj, Vk, VIIa, VIIb, VIIh, VIIi, VIIj

19. Title: (series)
Series: **GIVE AND TAKE**
Lesson: 12 programs
Grade Level(s): 8, 9, 10
Length: 15 minutes (each)
Taping Rights: through June, 1992
Producers: NJN in consortium
HSPT Skill(s): VII

20. Title: **Deciding When to Use Subtraction**
Series: **IT FIGURES**
Lesson: 1st of 28
Grade Level(s): 4
Length: 15 minutes
Taping Rights: through June, 1987
Producers: Agency for Instructional Technology and New Jersey Network
HSPT Skill(s): not applicable

21. Title: **Deciding How Close To Measure**
Series: **IT FIGURES**
Lesson: 2nd of 28
Grade Level(s): 4
Length: 15 minutes
Taping Rights: through June, 1987
Producers: Agency for Instructional Technology and New Jersey Network
HSPT Skill(s): Va

22. Title: **Problem Solving: Acting It Out**
Series: **IT FIGURES**
Lesson: 3rd of 28
Grade Level(s): 4
Length: 15 minutes
Taping Rights: through June, 1987
Producers: Agency for Instructional Technology and New Jersey Network
HSPT Skill(s): VII

23. Title: **Using Estimation**
Series: **IT FIGURES**
Lesson: 4th of 28
Grade Level(s): 4
Length: 15 minutes
Taping Rights: through June, 1987
Producers: Agency for Instructional Technology and New Jersey Network
HSPT Skill(s): IVf

24. Title: **Understanding Place Value**
Series: **IT FIGURES**
Lesson: 5th of 28
Grade Level(s): 4
Length: 15 minutes
Taping Rights: through June, 1987
Producers: Agency for Instructional Technology and New Jersey Network
HSPT Skill(s): IIb

25. Title: **Deciding When to Use Multiplication**
    Series: **IT FIGURES**
    Lesson: 6th of 28
    Grade Level(s): 4
    Length: 15 minutes
    Taping Rights: through June, 1987
    Producers: Agency for Instructional Technology and New Jersey Network
    HSPT Skill(s): not applicable

26. Title: **Using Fractions**
    Series: **IT FIGURES**
    Lesson: 7th of 28
    Grade Level(s): 4
    Length: 15 minutes
    Taping Rights: through June, 1987
    Producers: Agency for Instructional Technology and New Jersey Network
    HSPT Skill(s): I

27. Title: **Problem Solving: Drawing a Picture**
    Series: **IT FIGURES**
    Lesson: 8th of 28
    Grade Level(s): 4
    Length: 15 minutes
    Taping Rights: through June, 1987
    Producers: Agency for Instructional Technology and New Jersey Network
    HSPT Skill(s): VII

28. Title: **Looking at Objects from Different Positions**
    Series: **IT FIGURES**
    Lesson: 9th of 28
    Grade Level(s): 4
    Length: 15 minutes
    Taping Rights: through June, 1987
    Producers: Agency for Instructional Technology and New Jersey Network
    HSPT Skill(s): Vi

29. Title: **Using Mental Computation**
    Series: **IT FIGURES**
    Lesson: 10th of 28
    Grade Level(s): 4
    Length: 15 minutes
    Taping Rights: through June, 1987
    Producers: Agency for Instructional Technology and New Jersey Network
    HSPT Skill(s): NA

30. Title: **Deciding When to Use Division**
    Series: **IT FIGURES**
    Lesson: 11th of 28
    Grade Level(s): 4
    Length: 15 minutes
    Taping Rights: through June, 1987
    Producers: Agency for Instructional Technology and New Jersey Network
    HSPT Skill(s): VIIi

31. Title: **Problem Solving: Making a Table**
    Series: **IT FIGURES**
    Lesson: 12th of 28
    Grade Level(s): 4
    Length: 15 minutes
    Taping Rights: through June, 1987
    Producers: Agency for Instructional Technology and New Jersey Network
    HSPT Skill(s): VII

32. Title: **Using Multiplication and Addition**
    Series: **IT FIGURES**
    Lesson: 13th of 28
    Grade Level(s): 4
    Length: 15 minutes
    Taping Rights: through June, 1987
    Producers: Agency for Instructional Technology and New Jersey Network
    HSPT Skill(s): not applicable

33. Title: **Relating Fractions and Decimals**
    Series: **IT FIGURES**
    Lesson: 14th of 28
    Grade Level(s): 4
    Length: 15 minutes
    Taping Rights: through June, 1987
    Producers: Agency for Instructional Technology and New Jersey Network
    HSPT Skill(s): IVc

34. Title: **Predicting Your Change**
    Series: **IT FIGURES**
    Lesson: 15th of 28
    Grade Level(s): 4
    Length: 15 minutes
    Taping Rights: through June, 1987
    Producers: Agency for Instructional Technology and New Jersey Network
    HSPT Skill(s): IIa, VIIi

35. Title: **Using Bar Graphs**
    Series: **IT FIGURES**
    Lesson: 16th of 28
    Grade Level(s): 4
    Length: 15 minutes
    Taping Rights: through June, 1987
    Producers: Agency for Instructional Technology and New Jersey Network
    HSPT Skill(s): VIIa

36. Title: **Understanding Remainders**
    Series: **IT FIGURES**
    Lesson: 17th of 28
    Grade Level(s): 4
    Length: 15 minutes
    Taping Rights: through June, 1987
    Producers: Agency for Instructional Technology and New Jersey Network
    HSPT Skill(s): not applicable

37. Title: **Problem Solving: Recognizing Necessary Information**
Series: **IT FIGURES**
Lesson: 18th of 28
Grade Level(s): 4
Length: 15 minutes
Taping Rights: through June, 1987
Producers: Agency for Instructional Technology and New Jersey Network
HSPT Skill(s): VII

38. Title: **Finding Equivalent Fractions**
Series: **IT FIGURES**
Lesson: 19th of 28
Grade Level(s): 4
Length: 15 minutes
Taping Rights: through June, 1987
Producers: Agency for Instructional Technology and New Jersey Network
HSPT Skill(s): IVe

39. Title: **Finding Area by Covering**
Series: **IT FIGURES**
Lesson: 20th of 28
Grade Level(s): 4
Length: 15 minutes
Taping Rights: through June, 1987
Producers: Agency for Instructional Technology and New Jersey Network
HSPT Skill(s): Vg

40. Title: **Making Sense of a Big Number**
Series: **IT FIGURES**
Lesson: 21th of 28
Grade Level(s): 4
Length: 15 minutes
Taping Rights: through June, 1987
Producers: Agency for Instructional Technology and New Jersey Network
HSPT Skill(s): IVf

41. Title: **Estimating When Dividing**
Series: **IT FIGURES**
Lesson: 22nd of 28
Grade Level(s): 4
Length: 15 minutes
Taping Rights: through June, 1987
Producers: Agency for Instructional Technology and New Jersey Network
HSPT Skill(s): IVf

42. Title: **Comparing Decimals**
Series: **IT FIGURES**
Lesson: 23rd of 28
Grade Level(s): 4
Length: 15 minutes
Taping Rights: through June, 1987
Producers: Agency for Instructional Technology and New Jersey Network
HSPT Skill(s): II

43. Title: **Using Probability**
Series: **IT FIGURES**
Lesson: 24th of 28
Grade Level(s): 4
Length: 15 minutes
Taping Rights: through June, 1987
Producers: Agency for Instructional Technology and New Jersey Network
HSPT Skill(s): VIIf

44. Title: **Changing Scale on a Graph**
Series: **IT FIGURES**
Lesson: 25th of 28
Grade Level(s): 4
Length: 15 minutes
Taping Rights: through June, 1987
Producers: Agency for Instructional Technology and New Jersey Network
HSPT Skill(s): VIIa

45. Title: **Problem Solving**
Series: **IT FIGURES**
Lesson: 26th of 28
Grade Level(s): 4
Length: 15 minutes
Taping Rights: through June, 1987
Producers: Agency for Instructional Technology and New Jersey Network
HSPT Skill(s): VII

46. Title: **Problem Solving: Many Ways to Go**
Series: **IT FIGURES**
Lesson: 27th of 28
Grade Level(s): 4
Length: 15 minutes
Taping Rights: through June, 1987
Producers: Agency for Instructional Technology and New Jersey Network
HSPT Skill(s): VII

47. Title: **Problem Solving: Using a Guide**
Series: **IT FIGURES**
Lesson: 28th of 28
Grade Level(s): 4
Length: 15 minutes
Taping Rights: through June, 1987
Producers: Agency for Instructional Technology and New Jersey Network
HSPT Skill(s): VII

48. Title: **Measuring Instruments**
Series: **MATH WISE**
Lesson: 1st of 12
Grade Level(s): 9, 10, 11, 12
Length: 15 minutes
Taping Rights: through June, 1987
Producers: KOCE-TV
HSPT Skill(s): Va

49. Title: **Formulas**
    Series: **MATH WISE**
    Lesson: 2nd of 12
    Grade Level(s): 9, 10, 11, 12
    Length: 15 minutes
    Taping Rights: through June, 1987
    Producers: KOCE-TV
    HSPT Skill(s): Vg, VIIi

50. Title: **Numerical Comparisons**
    Series: **MATH WISE**
    Lesson: 3rd of 12
    Grade Level(s): 9, 10, 11, 12
    Length: 15 minutes
    Taping Rights: through June, 1987
    Producers: KOCE-TV
    HSPT Skill(s): IVe

51. Title: **Percent**
    Series: **MATH WISE**
    Lesson: 4th of 12
    Grade Level(s): 9, 10, 11, 12
    Length: 15 minutes
    Taping Rights: through June, 1987
    Producers: KOCE-TV
    HSPT Skill(s): III, VIIc, VIIe

52. Title: **Finding a Common Unit**
    Series: **MATH WISE**
    Lesson: 5th of 12
    Grade Level(s): 9, 10, 11, 12
    Length: 15 minutes
    Taping Rights: through June, 1987
    Producers: KOCE-TV
    HSPT Skill(s): III, IVe, VIIa, VIId, VIIe

53. Title: **Proportion**
    Series: **MATH WISE**
    Lesson: 6th of 12
    Grade Level(s): 9, 10, 11, 12
    Length: 15 minutes
    Taping Rights: through June, 1987
    Producers: KOCE-TV
    HSPT Skill(s): IVa, VIIh, VIIi

54. Title: **Organizing Information**
    Series: **MATH WISE**
    Lesson: 7th of 12
    Grade Level(s): 9, 10, 11, 12
    Length: 15 minutes
    Taping Rights: through June, 1987
    Producers: KOCE-TV
    HSPT Skill(s): VIIa

55. Title: **Graphs**
Series: **MATH WISE**
Lesson: 8th of 12
Grade Level(s): 9, 10, 11, 12
Length: 15 minutes
Taping Rights: through June, 1987
Producers: KOCE-TV
HSPT Skill(s): VIIa

56. Title: **Maps, Charts and Tables**
Series: **MATH WISE**
Lesson: 9th of 12
Grade Level(s): 9, 10, 11, 12
Length: 15 minutes
Taping Rights: through June, 1987
Producers: KOCE-TV
HSPT Skill(s): Vi, VIIa

57. Title: **Probability**
Series: **MATH WISE**
Lesson: 10th of 12
Grade Level(s): 9, 10, 11, 12
Length: 15 minutes
Taping Rights: through June, 1987
Producers: KOCE-TV
HSPT Skill(s): III, VIIe, VIIf

58. Title: **Choosing a Sample**
Series: **MATH WISE**
Lesson: 11th of 12
Grade Level(s): 9, 10, 11, 12
Length: 15 minutes
Taping Rights: through June, 1987
Producers: KOCE-TV
HSPT Skill(s): III, VIIa, VIIc, VII

59. Title: **Averages**
Series: **MATH WISE**
Lesson: 12th of 12
Grade Level(s): 9, 10, 11, 12
Length: 15 minutes
Taping Rights: through June, 1987
Producers: KOCE-TV
HSPT Skill(s): II, VIIg

60. Title: **Finding Areas of Rectangles**
Series: **MATH WORKS**
Lesson: 1st of 28
Grade Level(s): 4, 5, 6
Length: 15 minutes
Taping Rights: through June, 1996
Producers: AIT
HSPT Skill(s): Vg, VIIi

61. Title: **Identifying the Problem**
    Series: **MATH WORKS**
    Lesson: 2nd of 28
    Grade Level(s): 4, 5, 6
    Length: 15 minutes
    Taping Rights: through June, 1996
    Producers: AIT
    HSPT Skill(s): VIIi

62. Title: **Using Mental Computation for Addition**
    Series: **MATH WORKS**
    Lesson: 3rd of 28
    Grade Level(s): 4, 5, 6
    Length: 15 minutes
    Taping Rights: through June, 1996
    Producers: AIT
    HSPT Skill(s): IV, VII

63. Title: **Place Value in Decimals**
    Series: **MATH WORKS**
    Lesson: 4th of 28
    Grade Level(s): 4, 5, 6
    Length: 15 minutes
    Taping Rights: through June, 1996
    Producers: AIT
    HSPT Skill(s): II, IV, VII

64. Title: **Exploring Geometric Shapes**
    Series: **MATH WORKS**
    Lesson: 5th of 28
    Grade Level(s): 4, 5, 6
    Length: 15 minutes
    Taping Rights: through June, 1996
    Producers: AIT
    HSPT Skill(s): V, VII

65. Title: **Estimating by Rounding**
    Series: **MATH WORKS**
    Lesson: 6th of 28
    Grade Level(s): 4, 5, 6
    Length: 15 minutes
    Taping Rights: through June, 1996
    Producers: AIT
    HSPT Skill(s): IVf, VII

66. Title: **Simplifying the Problem**
    Series: **MATH WORKS**
    Lesson: 7th of 28
    Grade Level(s): 4, 5, 6
    Length: 15 minutes
    Taping Rights: through June, 1996
    Producers: AIT
    HSPT Skill(s): VIIi, VIIj

67. Title: **Relating Fractions and Decimals**
    Series: **MATH WORKS**
    Lesson: 8th of 28
    Grade Level(s): 4, 5, 6
    Length: 15 minutes
    Taping Rights: through June, 1996
    Producers: AIT
    HSPT Skill(s): IVe, VII

68. Title: **The Difference Between Perimeter and Area**
    Series: **MATH WORKS**
    Lesson: 9th of 28
    Grade Level(s): 4, 5, 6
    Length: 15 minutes
    Taping Rights: through June, 1996
    Producers: AIT
    HSPT Skill(s): Vg, VII

69. Title: **Using Tables**
    Series: **MATH WORKS**
    Lesson: 10th of 28
    Grade Level(s): 4, 5, 6
    Length: 15 minutes
    Taping Rights: through June, 1996
    Producers: AIT
    HSPT Skill(s): VII

70. Title: **Adding and Subtracting Fractions and Mixed Numbers with Like Denominators**
    Series: **MATH WORKS**
    Lesson: 11th of 28
    Grade Level(s): 4, 5, 6
    Length: 15 minutes
    Taping Rights: through June, 1996
    Producers: AIT
    HSPT Skill(s): Ia, Ib, VII

71. Title: **Sampling**
    Series: **MATH WORKS**
    Lesson: 12th of 28
    Grade Level(s): 4, 5, 6
    Length: 15 minutes
    Taping Rights: through June, 1996
    Producers: AIT
    HSPT Skill(s): VII

72. Title: **Exploring the Movement of Objects in Space**
    Series: **MATH WORKS**
    Lesson: 13th of 28
    Grade Level(s): 4, 5, 6
    Length: 15 minutes
    Taping Rights: through June, 1996
    Producers: AIT
    HSPT Skill(s): V, VII

73. Title: **Looking for a Pattern**
Series: **MATH WORKS**
Lesson: 14th of 28
Grade Level(s): 4, 5, 6
Length: 15 minutes
Taping Rights: through June, 1996
Producers: AIT
HSPT Skill(s): VII

74. Title: **Comparing Decimals**
Series: **MATH WORKS**
Lesson: 15th of 28
Grade Level(s): 4, 5, 6
Length: 15 minutes
Taping Rights: through June, 1996
Producers: AIT
HSPT Skill(s): II, VII

75. Title: **Using Diagrams and Models**
Series: **MATH WORKS**
Lesson: 16th of 28
Grade Level(s): 4, 5, 6
Length: 15 minutes
Taping Rights: through June, 1996
Producers: AIT
HSPT Skill(s): VIIa

76. Title: **Using Mental Computation for Subtraction**
Series: **MATH WORKS**
Lesson: 17th of 28
Grade Level(s): 4, 5, 6
Length: 15 minutes
Taping Rights: through June, 1996
Producers: AIT
HSPT Skill(s): IV, VII

77. Title: **Place Value of Large Numbers**
Series: **MATH WORKS**
Lesson: 18th of 28
Grade Level(s): 4, 5, 6
Length: 15 minutes
Taping Rights: through June, 1996
Producers: AIT
HSPT Skill(s): IV, VII

78. Title: **Other Estimation Strategies**
Series: **MATH WORKS**
Lesson: 19th of 28
Grade Level(s): 4, 5, 6
Length: 15 minutes
Taping Rights: through June, 1996
Producers: AIT
HSPT Skill(s): II, IVc, VIIj

79. Title: **Adding and Subtracting Fractions and Mixed Numbers with Unlike Denominators**
Series: **MATH WORKS**
Lesson: 20th of 28
Grade Level(s): 4, 5, 6
Length: 15 minutes
Taping Rights: through June, 1996
Producers: AIT
HSPT Skill(s): Ia, Ib, VII

80. Title: **Collecting Data**
Series: **MATH WORKS**
Lesson: 21th of 28
Grade Level(s): 4, 5, 6
Length: 15 minutes
Taping Rights: through June, 1996
Producers: AIT
HSPT Skill(s): VIIa

81. Title: **Using Graphs**
Series: **MATH WORKS**
Lesson: 22nd of 28
Grade Level(s): 4, 5, 6
Length: 15 minutes
Taping Rights: through June, 1996
Producers: AIT
HSPT Skill(s): VIIa

82. Title: **Possible Outcomes**
Series: **MATH WORKS**
Lesson: 23rd of 28
Grade Level(s): 4, 5, 6
Length: 15 minutes
Taping Rights: through June, 1996
Producers: AIT
HSPT Skill(s): VIIf

83. Title: **Understanding the Placement of the Decimal Point**
Series: **MATH WORKS**
Lesson: 24th of 28
Grade Level(s): 4, 5, 6
Length: 15 minutes
Taping Rights: through June, 1996
Producers: AIT
HSPT Skill(s): Ia, Id, VIIi

84. Title: **Dividing Regions into Sub-regions for Finding Area**
Series: **MATH WORKS**
Lesson: 25th of 28
Grade Level(s): 4, 5, 6
Length: 15 minutes
Taping Rights: through June, 1996
Producers: AIT
HSPT Skill(s): Vg, Vh, VII

85. Title: **Analyzing Data**
Series: **MATH WORKS**
Lesson: 26th of 28
Grade Level(s): 4, 5, 6
Length: 15 minutes
Taping Rights: through June, 1996
Producers: AIT
HSPT Skill(s): VIIa

86. Title: **Forming Ratios**
Series: **MATH WORKS**
Lesson: 27th of 28
Grade Level(s): 4, 5, 6
Length: 15 minutes
Taping Rights: through June, 1996
Producers: AIT
HSPT Skill(s): VIIh

87. Title: **Using Maps**
Series: **MATH WORKS**
Lesson: 28th of 28
Grade Level(s): 4, 5, 6
Length: 15 minutes
Taping Rights: through June, 1996
Producers: AIT
HSPT Skill(s): VIIa, VIIb

88. Title: **The Greatest Measurement Show on Earth**
Series: **MEASUREMETRIC**
Lesson: 1st of 12
Grade Level(s): 4, 5, 6
Length: 15 minutes
Taping Rights: through June, 1987
Producers: AIT
HSPT Skill(s): V, VIIj

89. Title: **Length 1: Who Measures**
Series: **MEASUREMETRIC**
Lesson: 2nd of 12
Grade Level(s): 4, 5, 6
Length: 15 minutes
Taping Rights: through June, 1987
Producers: AIT
HSPT Skill(s): V, VIIj

90. Title: **Length 2: A Thousand Clicks**
Series: **MEASUREMETRIC**
Lesson: 3rd of 12
Grade Level(s): 4, 5, 6
Length: 15 minutes
Taping Rights: through June, 1987
Producers: AIT
HSPT Skill(s): V, VIIj

91. Title: **Length 3: The Final Test**
Series: **MEASUREMETRIC**
Lesson: 4th of 12
Grade Level(s): 4, 5, 6
Length: 15 minutes
Taping Rights: through June, 1987
Producers: AIT
HSPT Skill(s): V, VIIj

92. Title: **Area 1: Barbara Arrives in Arealand**
Series: **MEASUREMETRIC**
Lesson: 5th of 12
Grade Level(s): 4, 5, 6
Length: 15 minutes
Taping Rights: through June, 1987
Producers: AIT
HSPT Skill(s): Vg, VIIj

93. Title: **Area 2: Barbara Searches the Squares**
Series: **MEASUREMETRIC**
Lesson: 6th of 12
Grade Level(s): 4, 5, 6
Length: 15 minutes
Taping Rights: through June, 1987
Producers: AIT
HSPT Skill(s): Vg, Vh, VIIj

94. Title: **Area 3: Barbara Finds the Formula**
Series: **MEASUREMETRIC**
Lesson: 7th of 12
Grade Level(s): 4, 5, 6
Length: 15 minutes
Taping Rights: through June, 1987
Producers: AIT
HSPT Skill(s): Vg, VIIj

95. Title: **Volume 1: Doc Cranshaw and the Kid - The Medicine Show**
Series: **MEASUREMETRIC**
Lesson: 8th of 12
Grade Level(s): 4, 5, 6
Length: 15 minutes
Taping Rights: through June, 1987
Producers: AIT
HSPT Skill(s): Ve, VIIj

96. Title: **Volume 2: Doc Cranshaw and the Kid - The Contest**
Series: **MEASUREMETRIC**
Lesson: 9th of 12
Grade Level(s): 4, 5, 6
Length: 15 minutes
Taping Rights: through June, 1987
Producers: AIT
HSPT Skill(s): Ve, VIIj

97. Title: **Volume 3: Doc Cranshaw and the Kid - The Winner**
Series: **MEASUREMETRIC**
Lesson: 10th of 12
Grade Level(s): 4, 5, 6
Length: 15 minutes
Taping Rights: through June, 1987
Producers: AIT
HSPT Skill(s): Ve, VIIj

98. Title: **Mass 1: The Case of the Disappearing Mass - Part 1**
Series: **MEASUREMETRIC**
Lesson: 11th of 12
Grade Level(s): 4, 5, 6
Length: 15 minutes
Taping Rights: through June, 1987
Producers: AIT
HSPT Skill(s): V, VIIj

99. Title: **Mass 2: The Case of the Disappearing Mass - Part 2**
Series: **MEASUREMETRIC**
Lesson: 12th of 12
Grade Level(s): 4, 5, 6
Length: 15 minutes
Taping Rights: through June, 1987
Producers: AIT
HSPT Skill(s): V, VIIj

100. Title: (series)
Series: **SOLUTIONS UNLIMITED**
Lesson: 8 programs
Grade Level(s): 6, 7, 8
Length: 15 minutes (each)
Taping Rights: Project T.A.P.E., NJN
Producers: AIT
HSPT Skill(s): VII

101. Title: (series)
Series: **TAX WHYS: UNDERSTANDING TAXES**
Lesson: 6 programs
Grade Level(s): 9, 10, 11, 12
Length: 15 minutes (each)
Taping Rights: through June, 1990
Producers: AIT
HSPT Skill(s): III, VII

102. Title: **All Aboard, Planet Ocean**
Series: **THE VOYAGE OF THE MIMI**
Lesson: 1 in two parts
Grade Level(s): 4, 5, 6
Length: 15 minutes each
Taping Rights: through June, 1987
Producers: The Bank Street College of Education
HSPT Skill(s): IV, VII

103. Title: **Setting Sail and Whale Watch**
Series: **THE VOYAGE OF THE MIMI**
Lesson: 2 in two parts
Grade Level(s): 4, 5, 6
Length: 15 minutes each
Taping Rights: through June, 1987
Producers: The Bank Street College of Education
HSPT Skill(s): V, VIIb

104. Title: **On the Shoals and Mapping the Blue Part**
Series: **THE VOYAGE OF THE MIMI**
Lesson: 3 in two parts
Grade Level(s): 4, 5, 6
Length: 15 minutes each
Taping Rights: through June, 1987
Producers: The Bank Street College of Education
HSPT Skill(s): V, VII

105. Title: **Counting Whales and Whale Bones**
Series: **THE VOYAGE OF THE MIMI**
Lesson: 4 in two parts
Grade Level(s): 4, 5, 6
Length: 15 minutes each
Taping Rights: through June, 1987
Producers: The Bank Street College of Education
HSPT Skill(s): V, VII

106. Title: **Going Fishing and Scraping the Bottom**
Series: **THE VOYAGE OF THE MIMI**
Lesson: 5 in two parts
Grade Level(s): 4, 5, 6
Length: 15 minutes each
Taping Rights: through June, 1987
Producers: The Bank Street College of Education
HSPT Skill(s): V, VIIj

107. Title: **Home Moves and Songs in the Sea**
Series: **THE VOYAGE OF THE MIMI**
Lesson: 6 in two parts
Grade Level(s): 4, 5, 6
Length: 15 minutes each
Taping Rights: through June, 1987
Producers: The Bank Street College of Education
HSPT Skill(s): V, VII

108. Title: **Fastening On and Hands Full of Words**
Series: **THE VOYAGE OF THE MIMI**
Lesson: 7 in two parts
Grade Level(s): 4, 5, 6
Length: 15 minutes each
Taping Rights: through June, 1987
Producers: The Bank Street College of Education
HSPT Skill(s): V, VII

109. Title: **Tracking the Whale and The World's Worst Weather**
Series: **THE VOYAGE OF THE MIMI**
Lesson: 8 in two parts
Grade Level(s): 4, 5, 6
Length: 15 minutes each
Taping Rights: through June, 1987
Producers: The Bank Street College of Education
HSPT Skill(s): V, VII

110. Title: **Shipwrecked and Goose Bumps**
Series: **THE VOYAGE OF THE MIMI**
Lesson: 9 in two parts
Grade Level(s): 4, 5, 6
Length: 15 minutes each
Taping Rights: through June, 1987
Producers: The Bank Street College of Education
HSPT Skill(s): VIIh, VIIj

111. Title: **Making Dew and Water, Water Everywhere**
Series: **THE VOYAGE OF THE MIMI**
Lesson: 10 in two parts
Grade Level(s): 4, 5, 6
Length: 15 minutes each
Taping Rights: through June, 1987
Producers: The Bank Street College of Education
HSPT Skill(s): V, VII

112. Title: **The Feast and A New Alchemy**
Series: **THE VOYAGE OF THE MIMI**
Lesson: 11 in two parts
Grade Level(s): 4, 5, 6
Length: 15 minutes each
Taping Rights: through June, 1987
Producers: The Bank Street College of Education
HSPT Skill(s): V, VII

113. Title: **Rowing Home and Boatshop**
Series: **THE VOYAGE OF THE MIMI**
Lesson: 12 in two parts
Grade Level(s): 4, 5, 6
Length: 15 minutes each
Taping Rights: through June, 1987
Producers: The Bank Street College of Education
HSPT Skill(s): V, VII

114. Title: **Separate Ways and A Sailor and a Scientist**
Series: **THE VOYAGE OF THE MIMI**
Lesson: 13 in two parts
Grade Level(s): 4, 5, 6
Length: 15 minutes each
Taping Rights: through June, 1987
Producers: The Bank Street College of Education
HSPT Skill(s): VII

115. Title: **Blockbusting**
Series: **THINKABOUT**
Lesson: 3rd of 60
Grade Level(s): 5, 6
Length: 15 minutes
Taping Rights: through June, 1987
Producers: AIT
HSPT Skill(s): VII

116. Title: **Approximating**
Series: **THINKABOUT**
Lesson: 6th of 60
Grade Level(s): 5, 6
Length: 15 minutes
Taping Rights: through June, 1987
Producers: AIT
HSPT Skill(s): V, VII

117. Title: **Using Estimating and Approximating**
Series: **THINKABOUT**
Lesson: 7th of 60
Grade Level(s): 5, 6
Length: 15 minutes
Taping Rights: through June, 1987
Producers: AIT
HSPT Skill(s): IVc, Ve, Vg, VII

118. Title: **But What Does It Mean?**
Series: **THINKABOUT**
Lesson: 12th of 60
Grade Level(s): 5, 6
Length: 15 minutes
Taping Rights: through June, 1987
Producers: AIT
HSPT Skill(s): VIIa

119. Title: **What Do I Know?**
Series: **THINKABOUT**
Lesson: 16th of 60
Grade Level(s): 5, 6
Length: 15 minutes
Taping Rights: through June, 1987
Producers: AIT
HSPT Skill(s): V, VII

120. Title: **What Should I Do?**
Series: **THINKABOUT**
Lesson: 18th of 60
Grade Level(s): 5, 6
Length: 15 minutes
Taping Rights: through June, 1987
Producers: AIT
HSPT Skill(s): VIIa, VIIg

121. Title: **Stereotyping People**
Series: **THINKABOUT**
Lesson: 22nd of 60
Grade Level(s): 5, 6
Length: 15 minutes
Taping Rights: through June, 1987
Producers: AIT
HSPT Skill(s): VIIa

122. Title: **People Patterns**
Series: **THINKABOUT**
Lesson: 24th of 60
Grade Level(s): 5, 6
Length: 15 minutes
Taping Rights: through June, 1987
Producers: AIT
HSPT Skill(s): VIIa

123. Title: **Natures Patterns**
Series: **THINKABOUT**
Lesson: 27th of 60
Grade Level(s): 5, 6
Length: 15 minutes
Taping Rights: through June, 1987
Producers: AIT
HSPT Skill(s): V, VII

124. Title: **Plan Ahead**
Series: **THINKABOUT**
Lesson: 33rd of 60
Grade Level(s): 5, 6
Length: 15 minutes
Taping Rights: through June, 1987
Producers: AIT
HSPT Skill(s): VIIb, VIIj

125. Title: **Calm Your Jitters**
Series: **THINKABOUT**
Lesson: 34th of 60
Grade Level(s): 5, 6
Length: 15 minutes
Taping Rights: through June, 1987
Producers: AIT
HSPT Skill(s): VII

126. Title: **Symbols**
Series: **THINKABOUT**
Lesson: 39th of 60
Grade Level(s): 5, 6
Length: 15 minutes
Taping Rights: through June, 1987
Producers: AIT
HSPT Skill(s): IVb, VII

127. Title: **More Than You Think**
Series: **THINKABOUT**
Lesson: 40th of 60
Grade Level(s): 5, 6
Length: 15 minutes
Taping Rights: through June, 1987
Producers: AIT
HSPT Skill(s): VIIi

128. Title: **Summarizing**
Series: **THINKABOUT**
Lesson: 41st of 60
Grade Level(s): 5, 6
Length: 15 minutes
Taping Rights: through June, 1987
Producers: AIT
HSPT Skill(s): VIIa

129. Title: **Maps and Models**
Series: **THINKABOUT**
Lesson: 42nd of 60
Grade Level(s): 5, 6
Length: 15 minutes
Taping Rights: through June, 1987
Producers: AIT
HSPT Skill(s): VIIa

130. Title: **Pursuasive Techniques**
Series: **THINKABOUT**
Lesson: 48th of 60
Grade Level(s): 5, 6
Length: 15 minutes
Taping Rights: through June, 1987
Producers: AIT
HSPT Skill(s): VIIa

131. Title: **Planning a Presentation**
Series: **THINKABOUT**
Lesson: 51st of 60
Grade Level(s): 5, 6
Length: 15 minutes
Taping Rights: through June, 1987
Producers: AIT
HSPT Skill(s): VIIa

132. Title: **One Thing Leads to Another**
Series: **THINKABOUT**
Lesson: 56th of 60
Grade Level(s): 5, 6
Length: 15 minutes
Taping Rights: through June, 1987
Producers: AIT
HSPT Skill(s): VIIi

133. Title: **A Matter of Time**
Series: **THINKABOUT**
Lesson: 57th of 60
Grade Level(s): 5, 6
Length: 15 minutes
Taping Rights: through June, 1987
Producers: AIT
HSPT Skill(s): IVc, VIIa, VIIj

134. Title: **There's Always a Risk**
Series: **THINKABOUT**
Lesson: 58th of 60
Grade Level(s): 5, 6
Length: 15 minutes
Taping Rights: through June, 1987
Producers: AIT
HSPT Skill(s): V, VIIa, VIIb, VIIj

135. Title: **Hanging in There**
Series: **THINKABOUT**
Lesson: 59th of 60
Grade Level(s): 5, 6
Length: 15 minutes
Taping Rights: through June, 1987
Producers: AIT
HSPT Skill(s): VIIa

136. Title: (series)
Series: **TRADE - OFFS**
Lesson: 1st of 15
Grade Level(s): 4, 5, 6
Length: 20 minutes (each)
Taping Rights: through June, 1987
Producers: AIT
HSPT Skill(s): VII

SOURCES FOR VIDEO PROGRAMS

The video programs listed in this guide are available through New Jersey Network and the County Audio-Visual Aids Commissions. Contact the following sources for more information.

NEW JERSEY NETWORK

Walter Freas, Director
Educational Services Division
New Jersey Network
1573 Parkside Avenue, CN 777
Trenton, New Jersey 08625
(609) 530-5215

THE NEW JERSEY ASSOCIATION OF AUDIO-VISUAL AIDS COMMISSIONS

1986 DIRECTORY

Atlantic County

Mrs. Dolly Butrus, Director
1200 Harding Highway
Mays Landing, New Jersey 08330
(609) 625-7000 Ext. 5459

Bergen County

Mr. Arthur Allen, Jr., Director
5-01 Bergen Avenue
Fairlawn, New Jersey 07410
(201) 791-6424

Burlington County

Mr. Mark Richie, Director
122 High Street
Mount Holly, New Jersey 08060
(609) 261-5053

Camden County

Mr. Dave Bermudez, Director
120 Warwick Road
Stratford, New Jersey 08084
(609) 667-6668

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Mrs. Cindy Flounder, Librarian
Crest Haven Complex
Cape May Court House, New Jersey 08210
(609) 465-7911 Ext. 289

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19 Landis Avenue
Bridgeton, New Jersey 08302
(609) 451-8000 Ext. 424

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Ravine Avenue & Gray Street
West Caldwell, New Jersey 07006
(201) 228-0651

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Hudson Avenue
Pitman, New Jersey 08071
(609) 589-7542

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Mr. Al Trattner, Director
678 Newark Avenue
Jersey City, New Jersey 07306
(201) 547-4524

Mr. William Koenig, Co-Director
Secaucus High School
Millridge Road
Secaucus, New Jersey 07904
(201) 348-8100

Hunterdon County

Mr. Edward Ulrich, Director
Box 227
3 Washington Avenue
High Bridge, New Jersey 08829
(201) 638-8048

Mercer County

Ms. Carol Calamoneri
2069 Greenwood Avenue
Trenton, New Jersey 08609
(609) 890-2290

Middlesex County

Mrs. Leona T. McVeigh, Director
Hamilton Center
319 N. Third Avenue
Highland Park, New Jersey 08904
(201) 246-8333

Monmouth County

Mr. David Warren, Director
Campbell Court & Highway 9
P.O. Box 1264
Freehold, New Jersey 07728-1264
(201) 431-7830

Morris County

Mr. Robert Rittman, Director
45 Highland Avenue
Whippany, New Jersey 07981
(201) 884-0980

3214j

Ocean County

Mr. James Raylman, Director
675 Batchelor Street
Toms River, New Jersey 08753
(201) 244-6231

Passaic County

Mr. Eric Hausmann, Director
Hunziker Wing 240
William Paterson College
300 Pompton Road
Wayne, New Jersey 07470
(201) 595-2383

Salem County

Dr. June Lang, Director
R.D. #2, Box 344
Woodstown, New Jersey 08098
(609) 769-2700

Somerset County

Mr. Stephen Justa, Director
Washington School
First Avenue
Raritan, New Jersey 08869
(201) 231-7173

Sussex County

Mr. Albert Eldridge, Director
18 Church Street
Newton, New Jersey 07860
(201) 383-2634

Union County

Mrs. Barbara Carlino, Director
Madison School
944 Madison Avenue
Rahway, New Jersey 07065
(Monday-Wednesday-Friday)
(201) 381-3109

Warren County

Mrs. Evelyn A. Burdette, Director
P.O. Box 366
Second Street
Belevidere, New Jersey 07823
(201) 475-3459

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New Jersey State Department of Education. (1985). Helping Educators Prepare Their Students for the High School Proficiency Test. Trenton, New Jersey.

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New Jersey State Department of Education. (1985). HSPT Skill Array: Mathematics. Trenton, New Jersey.

New Jersey State Department of Education. (1985). HSPT State Report: 1984-85 Analysis and Interpretation of Statewide Performance. Trenton, New Jersey.

New Jersey State Department of Education. (1985). Improving Mathematics Skills Assessed on the HSPT: Measurement and Geometry. Trenton, New Jersey.

New Jersey State Department of Education. (1985). Report on Educational Uses of Computers in New Jersey School Districts. Trenton, New Jersey.

New Jersey State Department of Education. (1985). Skills Array for the New Statewide Testing System. Trenton, New Jersey.

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APPENDIX A: ADDITIONAL RESOURCES

NEW JERSEY STATE DEPARTMENT OF EDUCATION
EDUCATIONAL TECHNOLOGY TRAINING CENTERS

There are three Educational Technology Training Centers (ETTCs) under the direction of the Regional Curriculum Service Units (RCSUs) in New Jersey. The centers were established in December, 1984, by a special appropriation of the New Jersey Legislature. The centers are located in the three geographical regions of the state: north, south, and central. These centers provide assistance in utilizing technology in New Jersey through inservice training and a collection of software, hardware, and curriculum materials that are available for review by New Jersey educators. Use of the facilities at the centers is free. The directors are friendly, helpful, highly trained, and well-informed. Contact a center to obtain information regarding the specific resources and/or services afforded at each.

A list of the centers follows:

Educational Technology Training Center - North
100 Evergreen Place
East Orange, New Jersey 07017
201-266-8694
Coordinator: Darlene Nowak

Educational Technology Training Center - Central
(located at Regional Curriculum Service Unit - Central [RCSU-C])
200 Old Matawan Road
Old Bridge, New Jersey 08857
201-390-6030
Coordinator: Ruth List

Educational Technology Training South - South
(located at Gloucester County College, Room 420, Instructional Building)
Tanyard and Salina Roads
Sewell, New Jersey 08080
609-468-5530
Coordinator: J. Evans Jennings, Jr.

PERIODICAL AND FORMAL REVIEW PUBLICATIONS

Periodicals provide a very current source of software or hardware reviews. Listed below are a few of the periodicals which might be referenced. Only those which actually provide qualitative evaluations are included. Additionally, although not listed here, there are machine-specific periodicals which often provide timely and substantial reviews. Your local librarian or computer resource person should be able to provide further details as to machine/title and availability.

Classroom Computer Learning
5615 West Cermak Road
Cicero, Illinois 60650

The Computing Teacher
The International Council for Computers in Education
University of Oregon
1787 Agate Street
Eugene, Oregon 97403-1923

Electronic Learning
Scholastic, Inc.
P.O. Box 2041
Mahopac, New York 10541

Teaching and Computers
Scholastic, Inc.
P.O. Box 2041
Mahopac, New York 10541

Instructor
P.O. Box 6099
Duluth, Minnesota 55806

Some publications are solely or largely dedicated to the task of evaluating computer software. Other resources have limited reviews, but provide excellent software listing. The following publications may be used as a reference source. Contact ETTCs, RCSUs, or a County Superintendent's Office for availability.

Digest of Software Reviews - Education
Educational Software selector
The Newsletter for Computing Educators
Educational Products Information Exchange (EPIE) and Consumers Union

RELATED DEPARTMENT OF EDUCATION DOCUMENTS

In order to assist educators in New Jersey, The Department of Education has published a number of works relating to the HSPT. Please contact the address below for current information on availability and new releases.

A Summary of the Report on Educational Uses of Computers In New Jersey

Educational Computing in New Jersey: A Resource Guide

Helping Educators Prepare Their Students for the High School Proficiency Test

High School Proficiency Test: Specifications and Items

High School Proficiency Test: School District Guidelines

High School Proficiency Test: Technical Report

HSPT Skill Array: Mathematics

HSPT State Report: 1984-85 Analysis and Interpretation of Statewide Performance

Improving Mathematics Skills Assessed on the HSPT: Measurement and Geometry

Improving Mathematics Skills Assessed on the HSPT: Computation of Percents

Report on Educational Uses of Computers in New Jersey School Districts

Skill Array for the New Statewide Testing System

Guides for HSPT correlations in reading, writing, and science also are available.

COMPUTER AND VIDEO INSTRUCTIONAL MATERIALS: HSPT RESOURCE GUIDE - WRITING

COMPUTER AND VIDEO INSTRUCTIONAL MATERIALS: HSPT RESOURCE GUIDE - READING

COMPUTER AND VIDEO INSTRUCTIONAL MATERIALS: RESOURCE GUIDE: ELEMENTARY SCIENCE

In order to obtain copies of this or another State of New Jersey publication contact the following department for ordering information:

NEW JERSEY DEPARTMENT OF EDUCATION
Office of Distributive Services
CN 500, 225 West State Street
Trenton, New Jersey 08625
CONTACT: David Joseph
PHONE: 609-984-0905

APPENDIX B:

EVALUATING AND UPDATING THIS GUIDE

INFORMATION ON UPDATING THIS GUIDE

Appendix B contains two sections. The first section is a blank software identification form which you may use for notifying us of appropriate materials. The Department of Education will be releasing updates to this guide periodically, and we welcome your feedback and recommendations regarding software. Please copy the enclosed form as needed, and mail the completed form(s) to the address listed.

The second section pertains to the evaluation of this document. This guide was prepared to assist educators in preparing for the HSPT more effectively. Enclosed is a form which provides for evaluation of the primary objective of this document. Your feedback will be an important contribution to the design of future publications. Please copy this form as needed, and mail the completed form(s) to the address provided.

SOFTWARE IDENTIFICATION FORM
HSPT AND MATHEMATICS CORRELATION

Please include one form for each program which you feel is of sufficient quality and design to be considered for release in future publications regarding correlation of math software and HSPT skills. (Fill in the blank, or circle where appropriate.)

PROGRAM TITLE:_____

GRADE LEVEL:

4 5 6 7 8 9 10 11 12

GROUP SIZE:

Individual Small Group Large Group

INSTRUCTIONAL MODE:

Drill and Practice	Testing	Remedial	Educational Game
Simulation	Tutorial	Enrichment	Logic and Problem Solving

SYSTEM REQUIREMENTS:

Apple	Atari	Commodore 64	PET
IBM/PC	PC/JR	TRS-80	COLOR

PRODUCERS:

Name:_____

Address:_____

_____

Telephone (_ _ _) -_ _ _-_ _ _ _

SUMMARY OF WHY YOU RECOMMEND THIS PROGRAM:

_____

_____

_____

Your Name: _____

Your Position: _____

Your District: _____

Please copy this form freely for additional responses.

Thank you.

Please return to:

New Jersey Department of Education
Educational Technology Unit
Division of General Academic Education
CN 500
225 West State Street
Trenton, New Jersey 08625

EVALUATION FORM

HSPT SKILLS ARRAY: MATHEMATICS
SOFTWARE AND VIDEO INSTRUCTIONAL MATERIALS

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1. How did you receive this guide? Did you receive orientation in its use?

2. Does the guide provide you with useful information?

3. Is the guide easy to read and understand?

4. How could the guide be improved?

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6. What workshops pertaining to this guide would be helpful to you?

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Thank you.

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